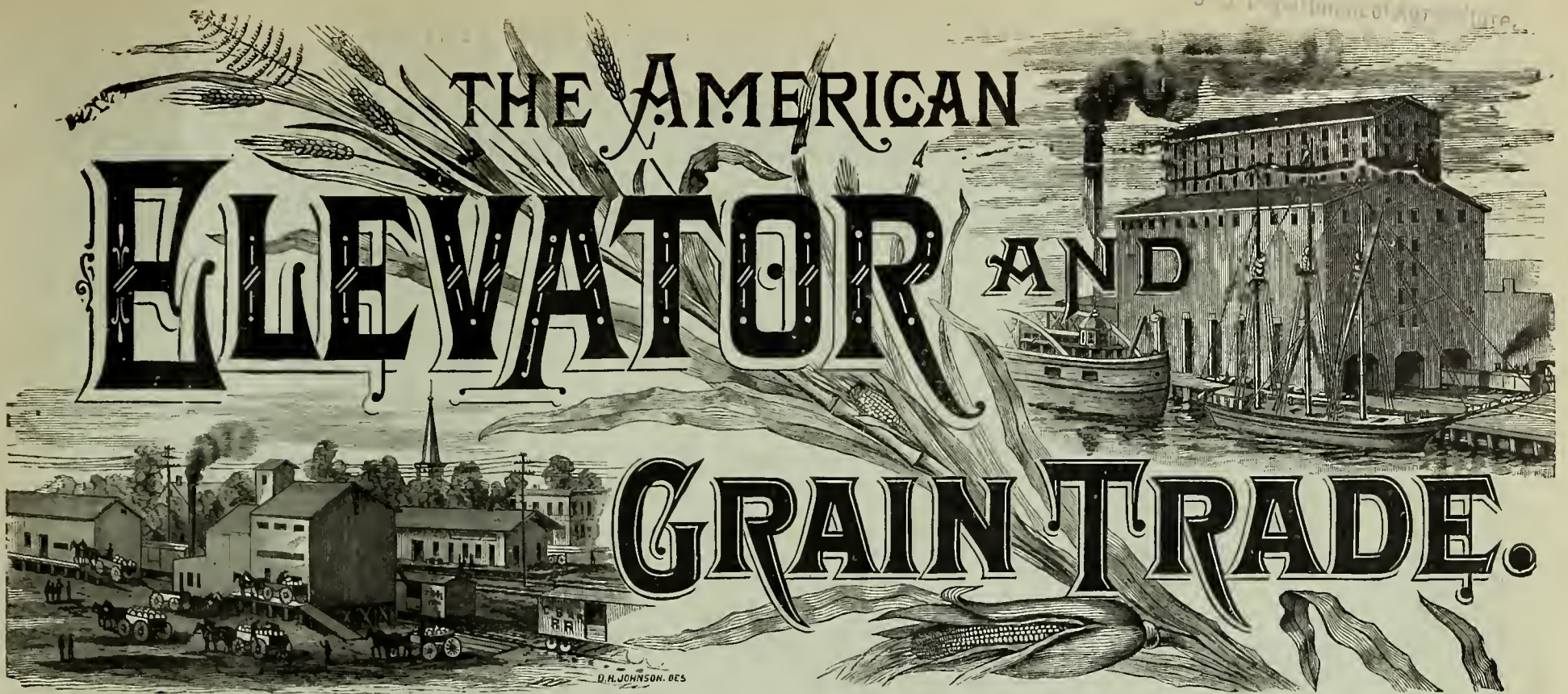


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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
MITCHELL BROS. COMPANY,
(INCORPORATED.)

Vol. XVIII.

CHICAGO, ILLINOIS, MARCH 15, 1900.

No. 9.

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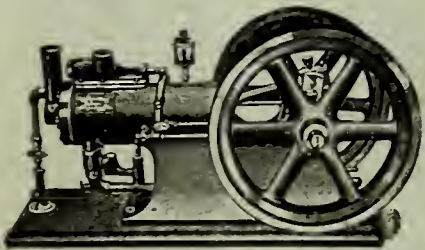
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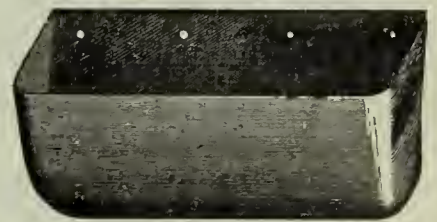
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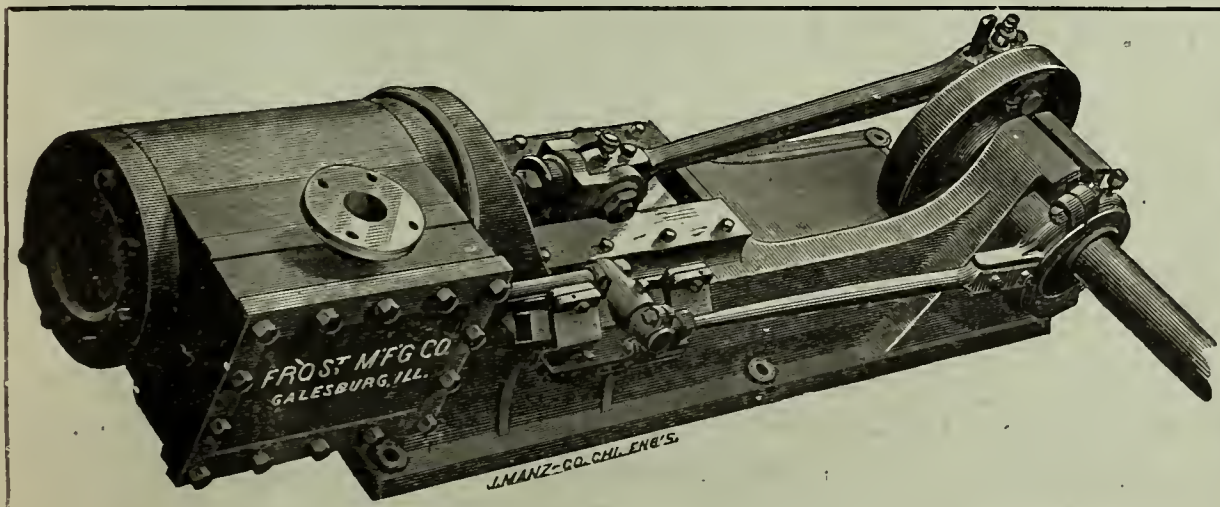
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Every Description,
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Requires No Power and Produces the Maximum of Results.

A FEW OF THE THINGS IT WILL DO.

WHEAT.

It will separate small and shrunken kernels, cockle, wild buckwheat, mustard, and grade into two sizes if desired.

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It is the only separator which will separate wheat and rye.

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It will remove oats, light kernels—bring it up to a malting standard and raise its value several cents per bushel.

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Handles malt in a better manner than any other.

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It will clean oats to perfection or grade into two sizes for oatmeal plants.

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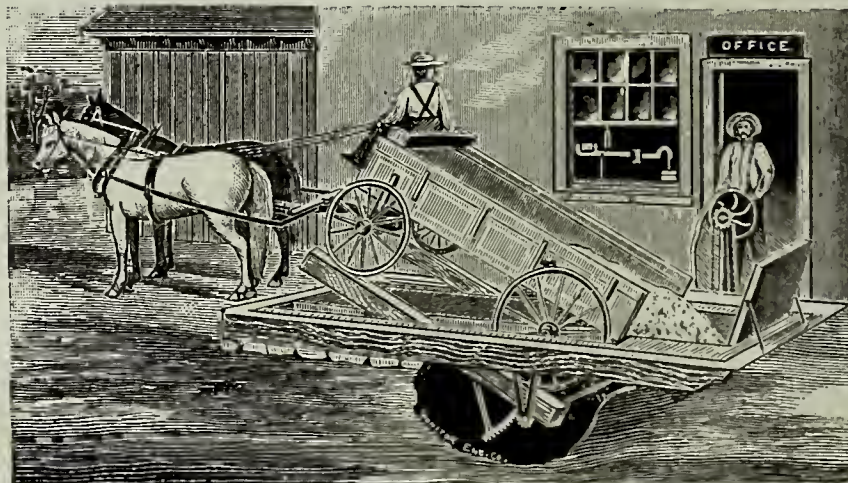
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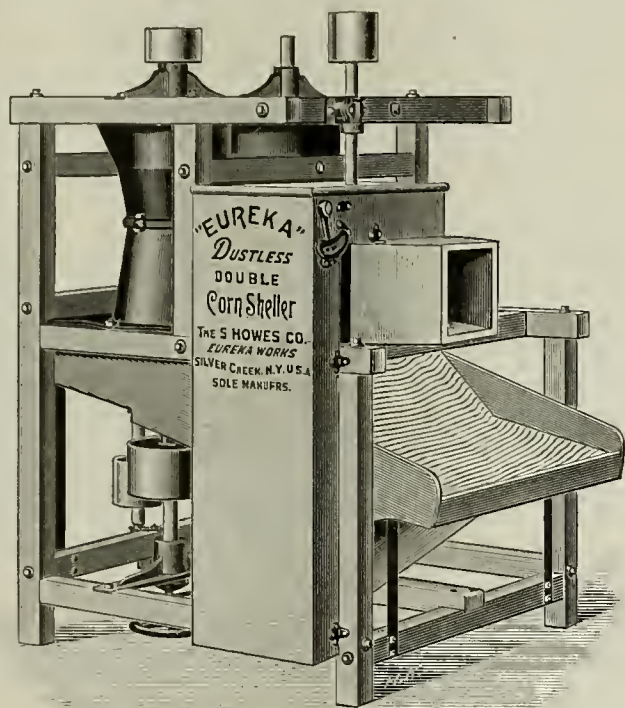
Yours truly,
M. C. WOODWORTH.

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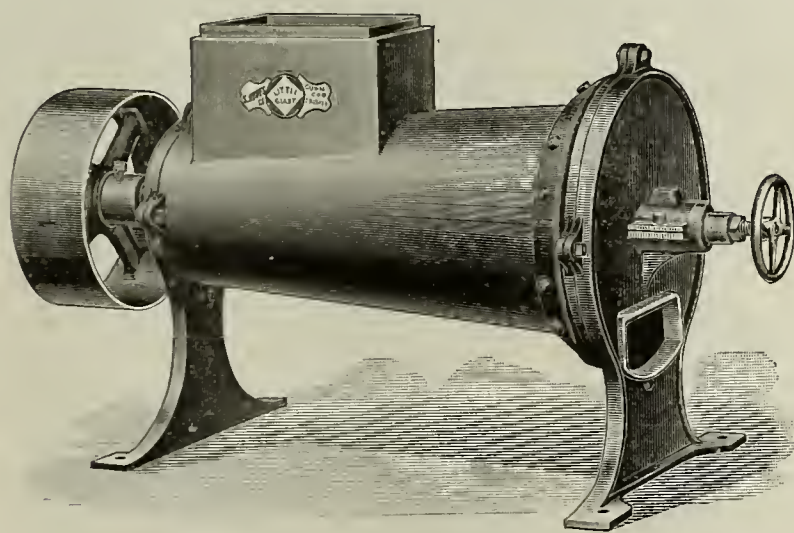
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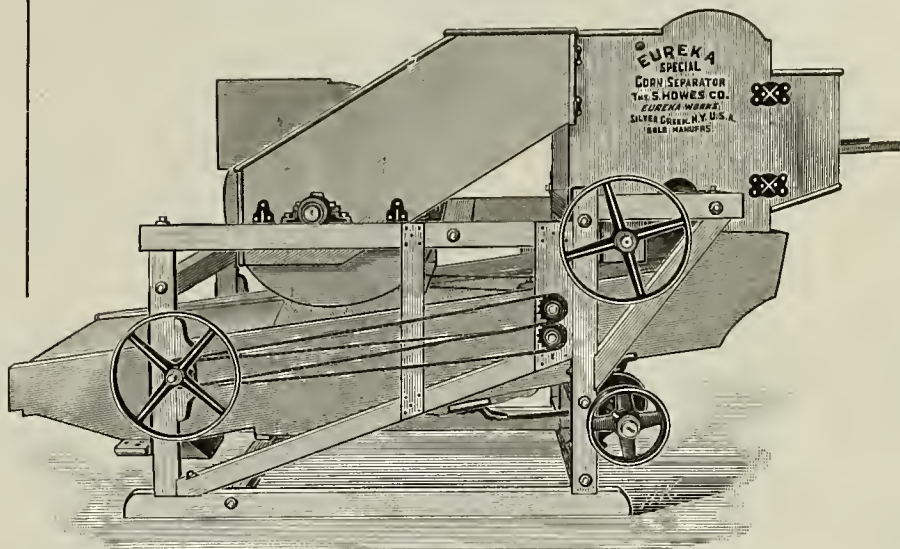
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Which is of large capacity, easy running, adjustable, and does perfect work.



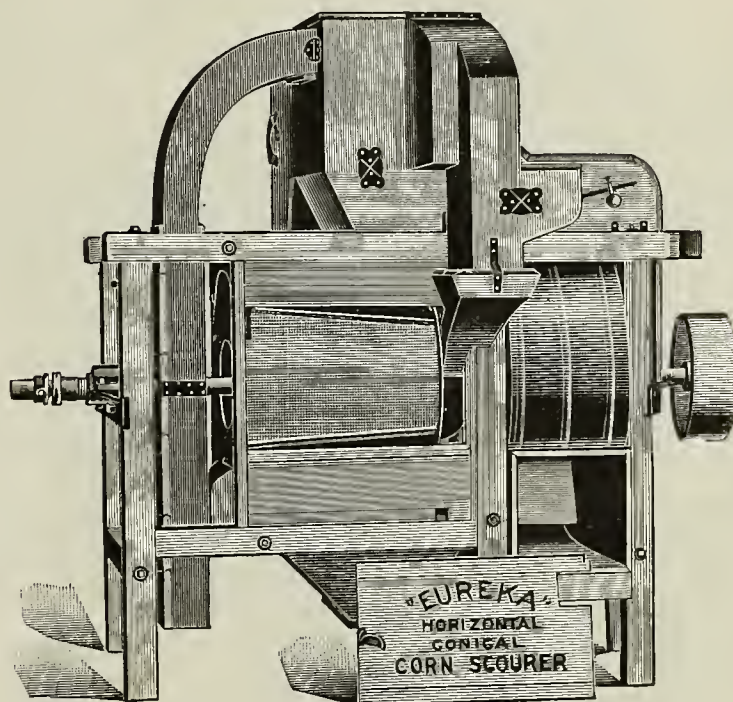
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Beats them all. Small space, great durability, low price.



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Perfect separations. Dustless in operation.



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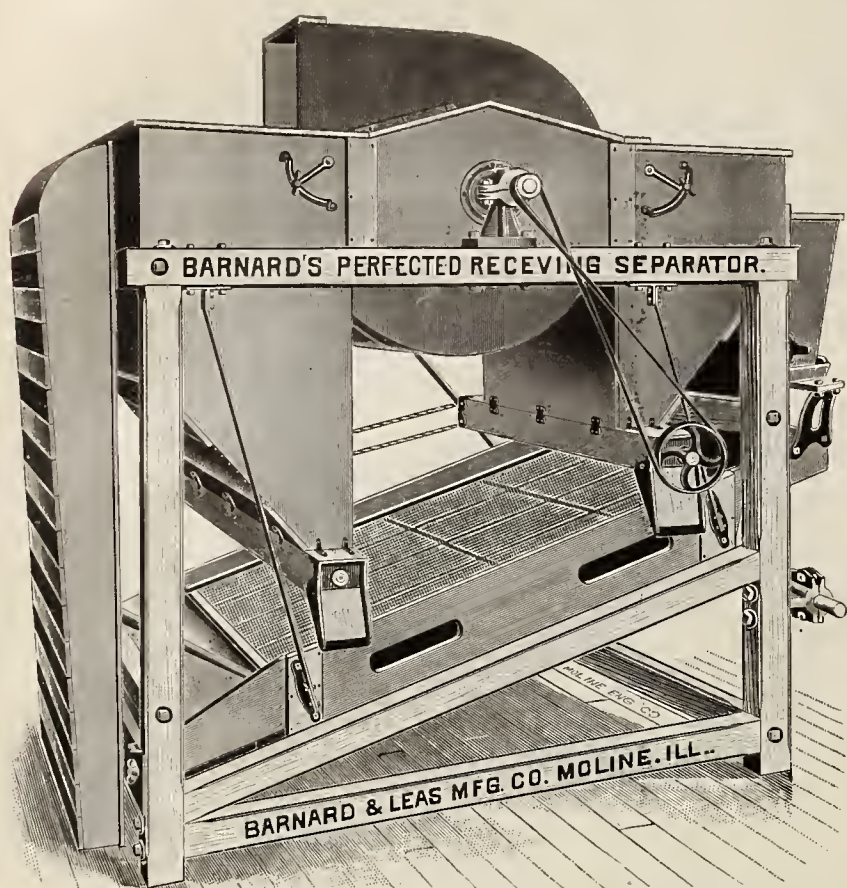
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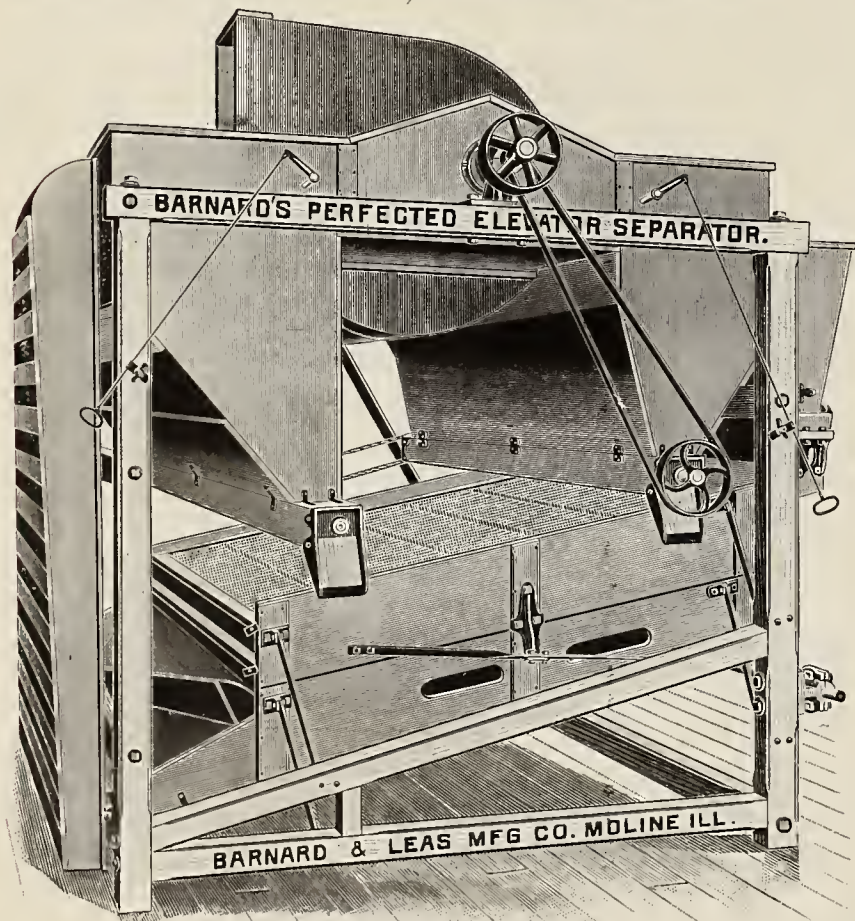
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Barnard's Separators have always led the World.
 Barnard's New Separators are better yet.
 Are better for removing oats from wheat.
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Makes the best sieve separation of any Separator on the market, and is the only succotash machine.

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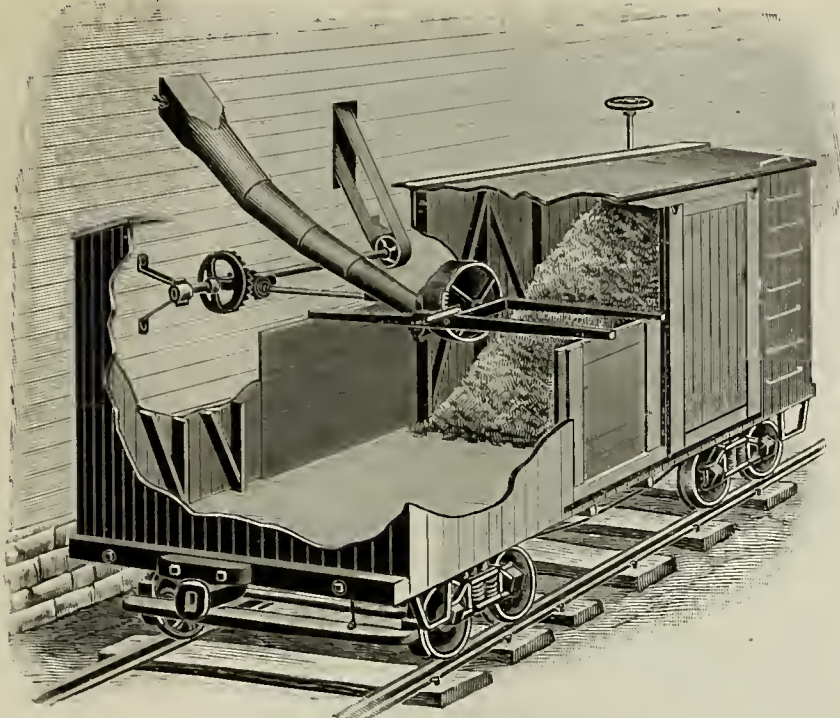
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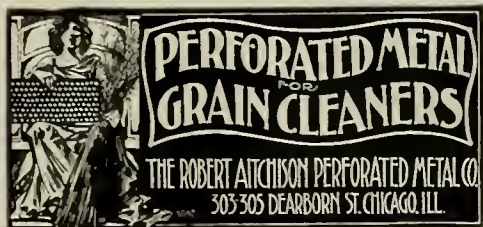
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If so, write us for advertising rates
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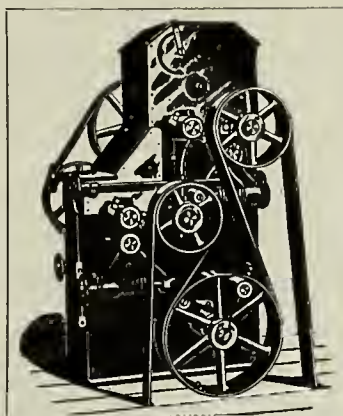
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IN SIXTY DAYS.
THAT IS WHAT

**NORTHWAY'S FOUR ROLLER CORN
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DOES.

Convenient adjustments, light running, rigid
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UTILIZE YOUR POWER
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85 Sizes and Styles.

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ELEVATOR SUPPLIES AND POWER CONNECTIONS.

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We manufacture Elevator Cups for all purposes, and make a greater number of sizes than found in any standard list. Our Cups have greater capacity than others of same rated size; for instance, our 3½x3 inch, list price 9c., has as much capacity as others 3¼x3¼ inch, list price 10c. Our prices are right.

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OVER A MILLION
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THE ONLY
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Because they are the only machines that will handle with equal facility grain containing 50 per cent moisture to that simply damp and musty.

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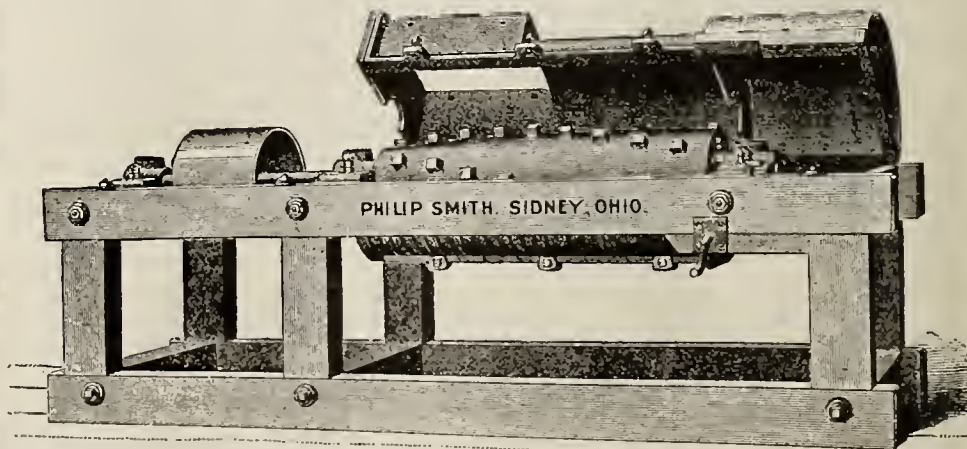
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SMITH'S AUTOMATIC WAREHOUSE AND ELEVATOR MACHINERY.

Corn Shellers, Separators, Cleaners, Ear Corn Feeders, Dumps, Conveyors, Self-Cleaning Boots and Heads, with Tighteners, Drags.

Also a full line of Elevator Supplies, Belting, Pulleys, Buckets, Boxend Hangers, Shafting, Etc. Everything for a Warehouse or Elevator.



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The simplest in construction of all Shellers. Among the many advantages to be obtained from this machine is that it gets all the corn, and will not plane the grain. Can shell new corn at least thirty days earlier than any other sheller. Requires less power to operate. Has a choke box, adjustable while running. The cylinder is made of chilled iron, cast solid on the shaft, thoroughly balanced. No set screws or keys to bother with. Cylinder made right or left, "as we do not recommend cross belts." All machines have three wide anti-friction bearings. Have stood the test for thirty years.

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THESE machines are the product of great practical knowledge, together with unlimited experiment and inventive genius, which when combined with our *guarantee* make the purchaser certain of a machine that will give perfect satisfaction. The workmanship and materials used in its construction are of the very best, thus eliminating frequent repairs.

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Only 1-8 to 3 Horse Power Used. We build this machine in eight different sizes, capacities ranging from 50 to 2,500 bu. per hour.

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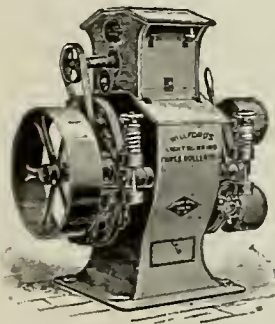
Some of our specialties: *Cleaning Wheat, Corn, Oats, Flax, Separating Wheat and Oats, Corn and Oats, Wheat and Flax.*

OUR SUCCOTASH MILL IS UNEQUALED.

Write for Circulars and Descriptions of our Different Machines.

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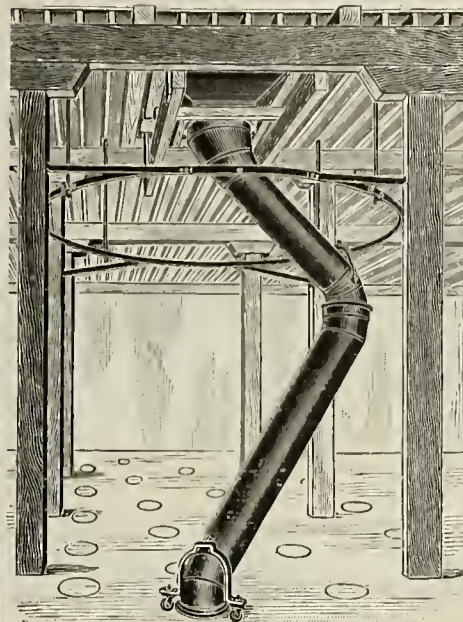
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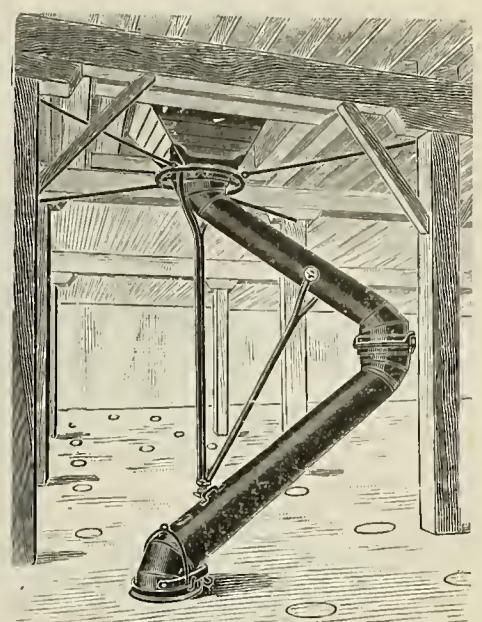
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Cleaned
to a
Standstill."

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Cleaning Machines,
Feed Mills,
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Engines and Boilers,
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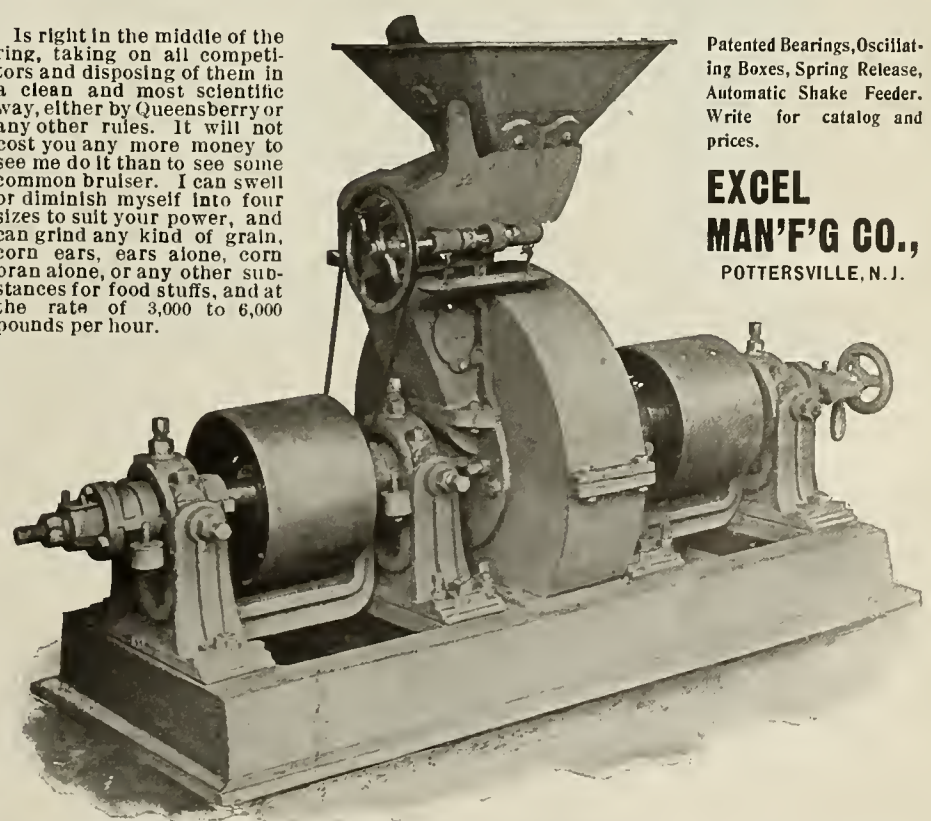
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Patented Bearings, Oscillating Boxes, Spring Release, Automatic Shake Feeder. Write for catalog and prices.

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The...Hess Pneumatic Grain Drier

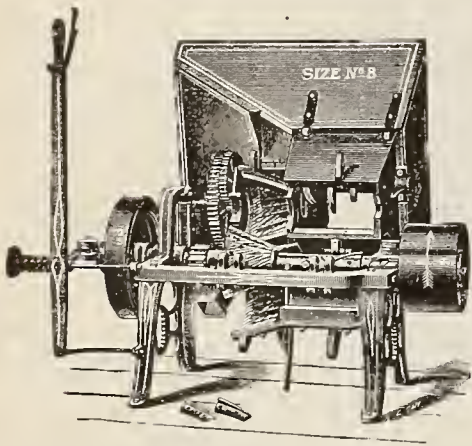
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ONLY DRIER

1. In which the grain is all in sight and "get-at-able" while drying and cooling.
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3. In which the grain may be mixed and stirred while drying without using power, by simply throwing a lever.
4. Which can be emptied and filled in sixty seconds by the watch and without stopping the blower.
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7. Which has been officially approved by the Chicago Underwriters' Association
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P. S.—No wire netting nor perforated metal used in the HESS.

Hess Warming and Ventilating Co., 708 Tacoma Building, Chicago.

The Best All-Around Feed Mill



Highest Award World's Fair.

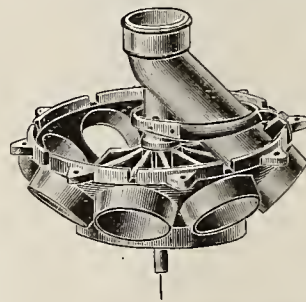
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For crushing ear corn and grinding all kinds of small grain. Different from all other mills. The conical burrs are light running and ahead of rolls or stones in speed and quality of work. Has self-feeder for ear corn and every convenience belonging to a first-class modern feed mill. Sold with or without bagging attachment. Made in seven sizes, ranging from 2 to 25 h. p. Improved for this season.

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Absolutely prevents mixing grain during process of distribution between turnspout and bins. Locks automatically, simple, accurate, positive. Automatically notifies operator when bin is full. Time approaches for elevator repairs. Book your order early. Don't attempt to handle another harvest with the sloppy, wasteful grain-mixing turnspout, which at best is but an improvised affair. Use an up-to-date mechanical device that often saves its cost in one day.

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Dust Protector.

The "Perfection" has an improved Automatic Valve, which compels perfect protection and ventilation. Thousands in use.

Nickel plated protector, postpaid, \$1. Cir. free.

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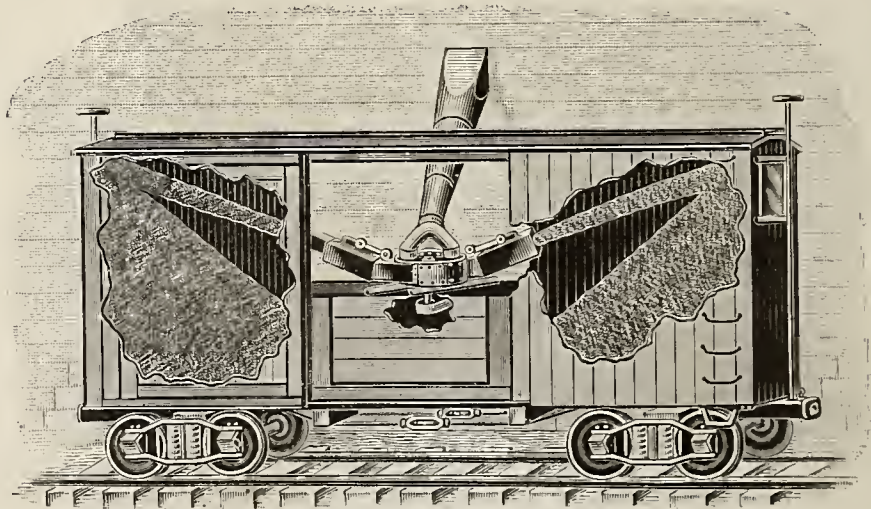
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THE IDEAL AUTOMATIC CAR LOADER.

The best and most practical machine in the market for loading all small grain. We guarantee it to do its work satisfactorily.

Write for full particulars, prices and terms to

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PATENT APPLIED FOR.

WHAT IT WILL DO:

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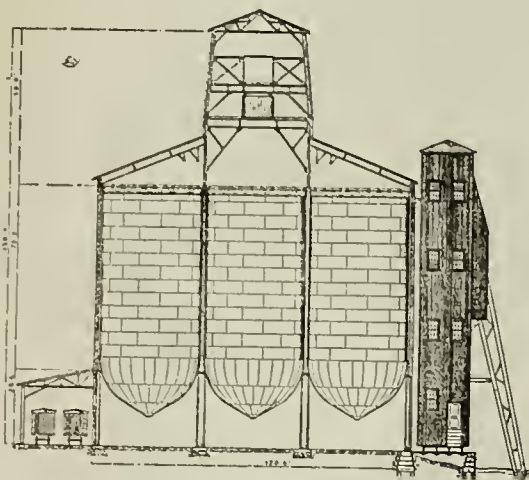
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Grain Elevators of Steel,

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Gas Holders with Steel Tanks.



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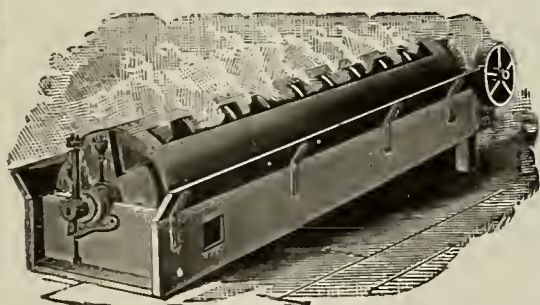
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Structural Works, Preble Avenue, Allegheny City, Pa.

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Which is also a successful
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Automatic in operation, requiring no attention. Double
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For NEW and BEST Way

UNION IRON WORKS,

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Manufacturers of the CELEBRATED

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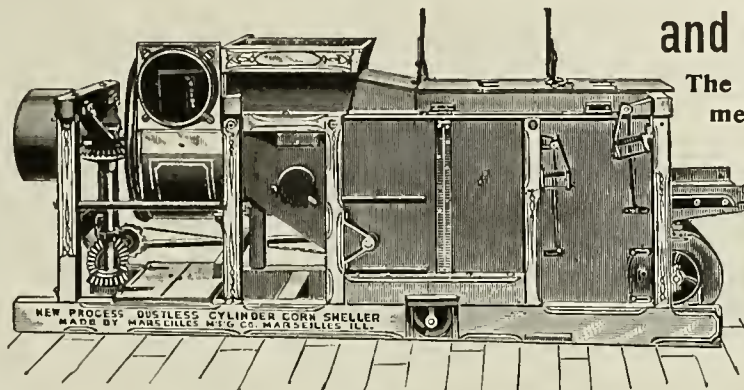
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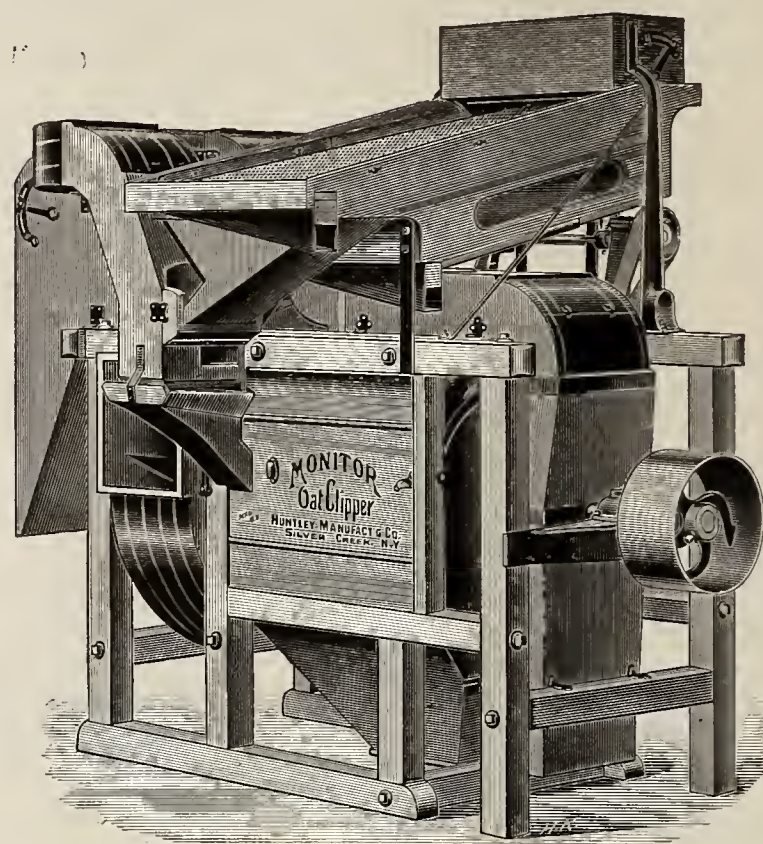
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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

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SELLS' GRAIN EXCHANGE ELEVATOR.

C. H. Sells' Grain Exchange Elevator is located at Rankin, in the extreme northwest corner of Vermilion County, Ill., where four great corn counties of Illinois meet. With Iroquois and Vermilion counties on three sides, and Ford and Champaign counties on the west and southwest, Rankin is in the heart of a corn district that has not its superior in the world. One is not surprised to learn that the town handles from 800 to 900 cars of grain annually. The market has a first-class reputation as a trading town, and this attracts farmers with their grain; while being the headquarters of a division of the Lake Erie & Western Railroad, it was generally more easy for grain dealers to get cars here during the car famine than at some other points. Yet, in spite of this, Mr. Sells in one week last fall was forced to turn away 3,000 bushels of grain for want of cars or storage room to handle it. Much of this grain came from other markets unable to handle it.

C. H. Sells is an experienced grain man, having operated for several years on the C. & E. I. road. He began the erection of the Exchange Elevator on April 1, 1899, and loaded his first car out on August 29, between which date and December 15 he handled 137 cars, with about 40 more cars in the elevator and in cribs. The elevator, which is located alongside the tracks of the L. E. & W. road, is one of the best in Illinois, and probably the best on that line of railroad. The building is 36x50 feet on the ground, and 48 feet high to the eaves. It has a cupola

18x30 feet in size and 20 feet high to its eaves, making the extreme height 75 feet. The storage capacity is 65,000 bushels of shelled corn. In construction it is a standard house, being built of 2x8's for the first four stories, and 2x6's for the upper three stories. It is inclosed with drop-siding and lined to the height of four stories. It is braced with 3,000 pounds of $\frac{7}{8}$ -inch rods, and 5,000 pounds

bushels of oats per hour. Ear corn can also be elevated and stored in any one or all of five deep bins, from which it may be removed at will and fed to the sheller by a Constant Feeder, or it may be sent in the same way from the dump directly to the sheller.

There are five hopper-bottomed bins on each side of the driveway, all being 48 feet deep, except the shipping bin. This bin has 1,700 bushels' capacity, and empties into a 600-bushel Howe Hopper Scale, in which all grain is weighed before it goes to the cars.

There is a No. 9 Constant Cleaner, with dust collector, and a No. 3 Victor Corn Sheller, located in the basement. The sheller has a capacity of 9,000 to 10,000 bushels per hour, and is fed by a Constant Feeder. The dust is collected in a separate house, 16x22 feet in size, built for that purpose. From this house it all passes to the boiler furnace, where it is burned.

The brick engine and boiler house is 22 feet square and located 42 feet away from the elevator. There are separate rooms for fuel and for tools. The power is a 30-horse power boiler and 25-horse power

engine. The engine is coupled direct to the line shaft running to the elevator. The power to the house elevators is transmitted by ropes to the top of the cupola, while the sheller, cleaner and feeders are driven from countershafts in the basement. The power equipment is separated from the office only by the platform of a 5-ton Fairbanks' wagon scale. The office is a frame building, 14x26 feet in size, divided into three parts—a private office, business office and a wardrobe. Altogether the plant is quite a model one, as convenient in



C. H. SELLS' GRAIN EXCHANGE ELEVATOR AT RANKIN, ILL.

of nails were used in the construction. The elevator is modern in its equipment and was planned to minimize labor as much as possible. The incline to the dump is only three feet high. The basement (which is carefully drained) being seven feet deep, the sinks have a depth of ten feet and a capacity of 1,600 bushels. The three dumps are all self-acting and self-locking, so that there is no danger of accident. There are two stands of elevators with 7x14-inch cups with a Constant Feeder for each elevator. The elevating capacity is 6,000

plan and equipment as one might wish, and has been found very easy to operate.

Mr. Sells has been handling grain in Rankin only about six months. In spite of the fact that the car famine and soft country roads have at times reduced the possible volume of business, he is more than satisfied with his location and with the outlook for the future.

WICHITA TO HANDLE GRAIN.

Wichita, Kan., is getting ready to handle grain in a wholesale way, and will be prepared to do business by the time the next crop goes to market. Two new elevators are now in course of erection, and at least two other firms are talking of building other houses for handling—that is, receiving, cleaning and reshipping—grain.

The T. L. Elevator Company's house, now being erected near the Rock Island depot, will have 50,000 bushels' storage capacity, and a handling capacity of twelve cars daily. The company will buy grain at stations on the Rock Island and Santa Fe roads.

The Wichita Elevator Company has located its house near the Santa Fe freight house. It will have storage capacity of 30,000 bushels and a handling capacity of twenty cars daily. This company will buy on the Santa Fe road exclusively, or nearly so.

This activity in grain at Wichita is said to be due to the revision of railway rates, which now give Wichita buyers equal opportunities with Kansas City buyers, who, until recently, were able to buy at stations west of Wichita and pay prices that kept Wichita out of the trade.

TRANSIT ELEVATORS ON THE THAMES.

The London Grain Elevator Company, whose elevators are located on the River Thames, started in business in 1893 in a small way, increasing gradually until 1898, when the monthly average of grain handled was over 43,000 tons. In October last it was 70,000 tons. The company is engaged largely in the transfer of grain from barge to barge or rail and has heretofore used floating pneumatic elevators, but recently it appeared desirable to erect a more permanent plant. Consequently four complete transfer elevators were erected. These four elevators are regarded as only the nucleus of what will at no distant time become a main factor in economically handling the grain trade of London.

Each of the four new elevators contains eight bins of 8,000 bushels' capacity each. They are not used ordinarily for storage purposes, but only for transit, the grain being weighed on the passage through by automatic scales. The elevators are built on a solid concrete base nearly six feet in thickness, thirty feet below the water level, on which rests a heavy cast-iron cellar or tank. The bin bottoms rest on specially strong wrought steel box girders, supported by massive pillars. The bins are built up on the interlaced timber system. The steel hoppers are so made that there are no joints at the corners, and with angles nicely rounded to allow the grain to run freely and entirely out when emptying. The roof is a steel framework covered with corrugated iron, which is used also to cover the sides.

The interior of each elevator is divided into nine equal sections, of which eight are devoted to bins and the ninth, or central, section is for elevators, stairway, etc. The tops of the bins are about 100 feet high and on them is a strong framework to carry the roof and to serve as a foundation for a 12-horse power gas engine, which drives two elevators, each of 100 tons' capacity per hour.

Each elevator has an outside barge, or marine leg of 120 tons per hour capacity, driven by a 10-horse power gas engine. This delivers the grain to the bottom of the inside receiving elevator which runs up the vacant center section of the building. No conveying bands are required, as the buildings are square and the elevating mechanism is in the center, which allows the grain to run by gravity to

any bin. Grain is drawn off from the bottoms of the hoppers to the delivery elevators, which in turn deliver by gravity spouts to the weigh-house, located between the elevator and the railway track or wharf. In the upper part of each weigh-house there is a large receiving hopper from which six automatic weighing machines take the feed from the receiving hoppers in each weigh-house, and after weighing trip automatically into sacks for rail or barge transportation, or in bulk to mill barges. Each set of double scales is provided with one belt conveyor to carry the full sacks to the cars as fast as twelve men—one to each scale—can tie up the sacks. A gas engine is used for running the conveyors.

CHARLES DUNWOODY.

Charles Dunwoody, the newly elected president of the Commercial Exchange of Philadelphia, whose portrait we are privileged to print herewith, is a Pennsylvanian by birth, his father, James Dunwoody, being a well-to-do farmer of Delaware County. When quite a young man Charles entered the office of his uncle, Ezekiel Dunwoody, in Philadelphia, as a clerk, and later succeeded to the business of Ezekiel Dunwoody & Co. He has continued



CHAS. DUNWOODY.

without change of firm name the flour, grain, seed and feed business which was established by his uncle in 1853.

Mr. Dunwoody has been an active member of the Commercial Exchange for many years. He is a daily attendant of its sessions, and has served on many of its important committees and also as a director. His business, under his close attention and strict integrity, has expanded until it ranks with the foremost in the trade.

He has two brothers, who are also actively engaged and have become very prominent in the flour and grain business of this country, to wit, William H. Dunwoody, who is now vice-president of the Washburn-Crosby Milling Company and president of the Anthony & Dakota Elevator Company, both Minneapolis corporations, and John Dunwoody, who is also identified with the latter company as its treasurer.

Under Mr. Dunwoody's presidency the Commercial Exchange of Philadelphia may be expected to continue that conservative course which has made the Philadelphia market so popular among shippers in the West who consign directly to tidewater terminals and which is year by year increasing Philadelphia's importance as a handler of export grain.

The two big starch companies, the National Starch Manufacturing Company and the United States Starch Company, are talking of uniting with a capital of \$25,000,000, which is nearly double the combined present capital of both companies.

CANADIAN ELEVATOR COMMISSION.

The Canadian Elevator Commission closed its investigations at Winnipeg last month with examinations of several railway officials. Illustrative of the Canadian Northern Railway's system of handling the grain trade, which is substantially the same on all the Canadian trunk lines, in Manitoba and the Northwest, the chief clerk of the C. N. Ry. testified in substance as follows:

All the elevators on the line are of 25,000 bushels' capacity, except one at Oka River, of 15,000 bushels. The flat warehouses average 4,000 bushels' capacity. The railway places no restrictions on elevator owners and has received no complaints of an elevator monopoly in that district. No special difficulty is experienced with flat warehouses, except the delay in loading. The company allows forty-eight hours for loading, and, in necessary cases, a longer period. Farmers are allowed to load direct from wagons, and they can obtain cars by application to the station agent or to the office at Winnipeg. Cars are distributed in the same manner as on other railways, and are all of 40,000 pounds' capacity. The railway allows farmers to build platforms for loading purposes. A few complaints have been received of car shortage at certain seasons. At present 130 miles of the road are being operated, along which wheat is being shipped, and on these 130 miles the company have 50 box cars, and in addition C. P. R. cars are used. The flat warehouses are giving satisfaction. The road has been drawing wheat for three years.

Elevator sites are leased for a period of five years, with the option of renewal.

AN ELEVATOR AND CONVEYOR FOR COTTON SEED.

The economical handling of cotton seed has long been a puzzling problem to the warehousemen along the Mississippi River. Formerly this work was done by gangs of darkies, who carried the seed in sacks on heavy trucks from boat to mill. Wherever elevators have been built close to the deep water, this old-time method has been done away with; but only recently has a plan been devised to carry cotton seed by elevator and conveyor from boat to mill, where the latter is at a considerable distance back from the wharf. Frank P. Barber of New Orleans has designed and constructed for the Union Mill Co., at their Crescent Mill at Gretna, La., a plant of this kind, which seems to meet all requirements.

The main part of the system is a belt conveyor, running on trestlework along the wharf, and thence under the roof of the mill. Along this conveyor the seed is carried from the end of the wharf, 250 feet, to a point in the mill where it is weighed and either stored or distributed direct to the crushers. From the time it is taken from the barge until it leaves the mill as a finished product, the seed is not touched by hand.

The difficult and interesting part of the plant is the device for taking the seed from the barges and elevating it to the conveyor. The difficulties to be surmounted are the high and low stages of the water and the shifting river bed, which, together with the action of the current, constantly twists and sinks the wharves. To counteract this tendency a strongly braced frame of heavy timbers, 43 feet high, was placed at the foot of the wharf, on a foundation separate from the wharf piling. Across the frame is a shaft, on which hinges the base of an A frame, on the other end of which the elevator, or "marine leg," swings vertically, in such a way as to be easily raised from and lowered into barges by means of a wire cable leading over a sheave at the top of the high frame and thence to the drum of a hoisting engine at its foot. The elevator is so constructed as to elevate the seed at all stages of the river.

Power to drive the elevator is transmitted through the belt conveyor itself, while the latter receives its power through a rope transmission from a steam engine in the mill. Friction clutches are placed at

suitable points, permitting the power to be instantly cut off from any part of the system. The present capacity of the Gretna plant, New Orleans, is 4,700 bushels, or 70 tons, of cotton seed per hour.

PIERCE ENGINE COMPANY'S WORKS.

The growth of the Pierce Engine Company of Racine, Wis., has been quite remarkable. Organized in May, 1893, the company began the manufacture of gas and gasoline engines in a small way and with a small force of employees. The engine became popular and the business grew until its works, shown in the accompanying picture, built during the fall and early winter of 1899, cover considerably more than half the area of a tract of four acres, located alongside of the tracks of the Milwaukee Division of the Chicago & Northwestern Railway. The number of employees now averages ninety-five, not counting the office force.

The buildings shown in the picture include the machine shop, testing and shipping rooms and engine and boiler room. The machine shop is of brick and is 60x100 feet in size. The testing room is 40x50 feet, and the shipping room 60x90 feet. Another building, not shown in the engraving, is the office,



PIERCE ENGINE COMPANY'S GAS AND GASOLINE WORKS AT RACINE, WIS.

a detached brick structure 35x40 feet in size. All the buildings contain the latest types of machines for producing the finished engines and for handling the product of the works in the most speedy and economical manner.

The product of the works consists of three types of gas and gasoline engines—for stationary, marine and portable uses. The sizes of stationary engines run from one to thirty-five horse power, of the marine type from one to twelve horse power, and of portable engines from six to seventeen horse power. The capacity of the plant is equal to 2,500 engines annually, and last year about 1,500 engines were sold. Many of these went into grain elevators, where they are now doing daily and satisfactory service. Indeed, now that the gas or gasoline engine has been perfected and become as successful in practice as it long has been in theory, it is the ideal type of power for elevators and other establishments requiring power in moderate horse powers and at irregular intervals. About 400 engines built in these works were exported last year and are now in use abroad. They were almost entirely of the marine and stationary types, the former largely predominating.

A. J. Pierce is president and treasurer of the company and Jos. Schroeder secretary. The company is about to issue an entirely new catalog, and will be pleased to send copies to all persons interested in gas engines, and such copies may be had on application.

The packing business of Armour & Co. is to be incorporated with \$20,000,000 of capital stock. The grain business will not be included, however.

CEREALS IN THE PHILIPPINES.

The only cereals grown in the Philippines are rice and corn. Of these, rice is by far the more important, being the staple food of the native population, as well as of the inhabitants of other Oriental races. A scarcity of rice always brings hardship and suffering to the people.

Several varieties of rice are grown, differing from each other more or less in color, size and flavor of the kernels. The "mismis" is the best. The "malaguit" is unusually glutinous and the flour is much used for making pastry. By planting a quick and a late maturing varieties, two crops may be harvested in one year.

The ordinary price of rice in the husk is about 60 to 65 cents per bushel, while that of shelled rice is about 90 cents to \$1 per bushel. The annual production of rice in the Philippines averages about 36,000,000 bushels. This amount is far below the actual requirements of the population. In fact, the islands do not produce enough food for the consumption of its own inhabitants. In order to supply the home demand, it has been the custom to draw upon the product of other rice-growing countries, the French colony of Cochinchina being the principal source of supply. In some years the quantity of

rice imported into Manila from Saigon has exceeded 3,200,000 bushels, worth nearly \$2,000,000.

In several provinces of the Philippines, as for example in Cayan and La Isabela, on the island of Luzon, the inhabitants subsist chiefly on Indian corn, which is grown together with tobacco. As a rule, corn is not consumed so largely in other parts of the archipelago, although in years when the rice crop has been deficient this grain has formed an indispensable supplement to the dietary of the native population. Several varieties of corn are grown. The early varieties are generally preferred, because their use permits the harvesting of two crops in one year. The annual production is about 4,250,000 bushels. It is sold at about 18 to 23 cents per bushel of shelled grain.

THE CLOVER SEED MARKET.

Prices of clover seed in the Toledo market are at top figures for this time of year, and October seed has been selling at \$5.10. The demand is good, and H. L. Kenilworth of Wilmington, Del., who is said to be a member of the "clover seed syndicate," says that the trade will absorb a great deal more. Toledo is the prime market for clover seed, and there is a great stock in storage there. An average of about 12,000 bags a month are received and shipped from Toledo.

The government report gives the exports of clover seed for the six months ending with last December, as 126,000 bags. For the twelve months of the year 1899 the exports were 196,800 bushels. Frank I. King states the prospects at present outlook as indicating a general clean-up of the country's sur-

plus this season, to meet an increased demand for export, and says that stocks in Toledo in July next will be smaller than a year and two years ago, and will probably be between 15,000 and 30,000 bags. The shipments at present average larger than the receipts.

A LEASE EXEMPTION OF RAILWAY COMPANY FOR DAMAGE OF WAREHOUSE BY FIRE IS VALID.

BY J. L. ROSENBERGER OF THE CHICAGO BAR.

In the case of the Hartford Fire Insurance Company against the Chicago, Milwaukee & St. Paul Railway Company, the Supreme Court of the United States has passed upon a question of great importance to elevator owners occupying the railway right of way. In short, the decision of this case turned upon the question whether a provision in the lease by the railway company of a strip of land, part of its depot grounds, for a cold storage warehouse, by which the railway company should be released from liability for damage to the property in case of fire, caused by its locomotive engines, owing to the negligence of itself or its servants, is void as against public policy.

The discussion by the court of the points raised and the principles involved is quite exhaustive. It begins with pointing out that there is a distinction between cases of this kind and those wherein it has been held that a railway company cannot by contract evade liability for loss or injury to freight caused by its negligence. For one thing, the court says that a railway company is not obliged, and cannot even be compelled by statute, against its will, to permit private persons or partnerships to erect and maintain elevators, warehouses or similar structures for their own benefit upon its land.

The warehouse here in question was built and owned by a commercial partnership, which agreed to pay an annual rent of \$5 for the use of the land. But the court says that no one had a right to put a warehouse or other building upon the land of the railway company without its consent; and the company was under no obligation to the public or to the partnership to permit the latter to do so. In granting and receiving the license (or lease) from the company to the partnership to place and maintain a warehouse upon a strip of such land by the side of the railway track, and in erecting the warehouse thereon, both parties knew that its proximity to the track must increase the risk of damage, whether by accident or by negligence, to the warehouse and its contents by fire set by sparks from the locomotive engines or by trains of cars running off the track. The principal consideration expressed in their contract for the license to build and maintain the warehouse on this strip of land was the stipulation exempting the railway company from liability to the licensee for any such damages. And the court declares the public had no interest in the question which of the parties to the contract should be ultimately responsible for such damages to property placed on the land of the railway company by its consent only.

The validity of such an agreement as the one here in controversy, the court further holds, does not depend upon the constitution, laws or treaties of the United States, nor upon any principle of the commercial or mercantile law, or of general jurisprudence. Generally speaking, the court continues, the right of a railway corporation to build its road and to run its locomotive engines and cars thereon within any state is derived from the Legislature of the state; and it is within the undisputed powers of that Legislature to prescribe the precautions that the corporation shall take to guard against injuries to the property of others by the running of its trains, as well as the measure of its liability in case such injuries happen. And questions of public policy as affecting the liability for acts done, or upon contracts made and to be performed, within one of the states of the Union—when not controlled by the constitution, laws or treaties of the United States, or by the principles of the

commercial or mercantile law or of general jurisprudence, of national or universal application—are governed by the law of the state as expressed in its own constitution and statutes or declared by its highest court.

The court then proceeds to consider the statutes and decisions of the state of Iowa, so far as they throw light upon this case, which arose in that state, and concludes (20 Supreme Court Reporter, 33) that judgment was rightly rendered in favor of the railway company, upholding the validity of the provision in the lease exempting it from liability, as above quoted.

A somewhat similar decision was recently rendered by the Supreme Court of North Dakota in Northern Pacific Railway Co. against McClure et al., 81 Northwestern Reporter, 52. The N. P. R. R. Co. had leased a portion of its right of way to certain parties for warehouse purposes. These parties covenanted in the lease that, in addition to paying a nominal rent, they would hold the lessor (railroad company) harmless from losses arising out of the destruction of property on the leased premises by fires set by the lessor's engines. There was also a stipulation in the lease that all of its covenants and conditions should be binding upon the assigns of both parties to it. Thereafter, the Northern Pacific Railroad Company transferred all of its property, including the premises thus leased and the lease, to the Northern Pacific Railway Company. The lessees or parties taking the lease consented to such transfer, and treated the latter or new company as their landlord. When the warehouse burned, the insurance company paid the lessees the loss and recovered from the railway company, which in turn sued the lessees to recover the amount according to the terms of the lease. A demurrer was interposed, but this was overruled and a judgment was entered for the railway company. In affirming this judgment, the Supreme Court of North Dakota holds that the covenant to save harmless passed to the plaintiff company, and that it was accordingly entitled to recover thereon.

WABASH AND INDIANA ELEVATORS CHANGE HANDS.

An important change in grain elevator management will take place in Chicago June 1, when C. L. Reynolds & Co. of Toledo will take charge of the Wabash and Indiana elevators, which have been operated heretofore by the Chicago Elevator Co. The two warehouses have a capacity of 3,000,000 bushels. They are owned by the Wabash and Western Indiana Railway companies and have been operated for years by a company of which Russell Sage is president and Lloyd J. Smith local manager.

The announcement that the Chicago Elevator Co. had decided to liquidate its assets and close up its affairs came from President Russell Sage himself and was confirmed by Chicago officers of the company. It is said that Lloyd J. Smith will go into the cash grain business for himself.

C. L. Reynolds is a member of the well-known firm of Reynolds Bros., grain and commission merchants of Toledo, O. He is a director in the Chicago Elevator Co. and was formerly in the commission business in Chicago. His firm in Toledo has been in close touch with the Wabash Railroad, and having stock interests in the Chicago Elevator Company, it was most natural that Mr. Reynolds should take an interest in its welfare. Mr. Reynolds will move to Chicago and give his personal attention to the management of the two elevators. He recently stated that he has not decided as to whether his house would continue the organization of the Chicago Elevator Company or operate the houses under some other style.

The stock of the Chicago Elevator Company is said to be largely held in New York by Russell Sage, the Goulds and others, and the reason given for desiring to liquidate is that the business of late has not been profitable. Furthermore, the new drainage canal has seriously lowered the water in the slips adjacent to the elevators, and the eleva-

tion of the Belt Line tracks, on which the Wabash Elevator is located, will make expensive changes necessary. The Reynolds Bros. are experienced grain men, with ample capital, and their advent into Chicago elevator circles is an important event.

W. T. KEMPER.

The young men's ticket swept everything before it at the late annual election of the Kansas City Board of Trade, and at the close of one of the most exciting, though entirely good-natured, contests this exchange has ever witnessed, W. T. Kemper, of the Kemper Grain Company, was declared elected president by a majority of twenty-seven over A. D. Johnson, who has been a member of the Board of Trade for twenty years. Mr. Kemper's contemporaries in the management of the exchange for 1900 were also in the main, selected from the ranks of the younger members. The choice of Mr. Kemper to be president was a distinguished mark of the Board's confidence in that gentleman's business ability, he being the youngest man who has ever been raised to the highest office in the gift of the Kansas City Board of Trade. The choice is, however, only in the nature of a promotion, for his capacity as an



W. T. KEMPER.

official had already been tested. For two years he served as a director, one as second vice-president and one as first vice-president. It is quite evident, therefore, that while Mr. Kemper's selection was a spontaneous tribute to his business reputation and to his executive capacity, it was not a hasty or spasmodic but a deliberate and well-planned movement.

Mr. Kemper, who is now in his thirty-third year, is distinctly a product of the trans-Mississippi West—a type of the youngest generation of business men, who have grown up in a country that only yesterday, as it were, was the frontier of the Far West. Born at Gallatin, Mo., he was taken at a very early age by his parents to St. Joseph, in the same state, where he passed his boyhood, and where he was educated, graduating from the high school of the city.

He began his business career as traveling salesman for Noyes, Norman & Kemper, manufacturers and jobbers of shoes, the junior member of the firm being his father. Four years of traveling for this house were succeeded in 1887 by a venture in general merchandise at Valley Falls, Kan. He succeeded, of course, and from merchandising drifted naturally into banking and handling grain in a moderate way. In the last-named line of business he seems to have "struck his gait," as the vernacular hath it, and in 1893 he removed to Kansas City, and in August embarked in the grain trade on a large scale by organizing the Kemper Grain Company, which immediately became a prominent factor in the Kansas City market, and has ever since

maintained a conspicuous position in the grain trade of the Southwest.

Large as are his interests in the grain trade of the Southwest, Mr. Kemper is quite as conspicuous in Missouri, Kansas and Oklahoma as a merchant, being proprietor of a number of mercantile establishments in those states, those especially in Topeka, Valley Falls and Leavenworth representing large investments, so that he is coming to be known as the "Merchant Prince of Kansas." He is also a large real estate and ranch owner, his cattle plantations in Louisiana being particularly valuable and noted at the Kansas City yards for their consignments of live stock.

At the Board of Trade election Mr. Kemper stood as the especial candidate of the young men, but, says the Kansas City Times, "there is no fear among the members that he will not conduct the affairs of the office in a thoroughly efficient and careful manner. Although his operations in all lines have been marked by a progressive spirit, he has always been known as a sound and safe business man."

BROOM CORN STRONG.

The "Broom Corn Trust," so called, failed to elevate the price of brush at the regular meeting held on February 14, when 1,000 tons were sold. The price was \$200 per ton. Some members of the combination then wanted to push it up to \$220, but the effort failed. It is said, however, that President Reitz of Evansville, Ind., offered to take the entire holdings of the company at \$200,000, and as this offer was refused, a raise may be expected before the new crop is ready—probably at the next meeting of the company.

The trade is now worrying itself about the prospective over-production of brush, all indications now pointing to a large increase in the acreage to be planted this spring. All those who have anything to do with the handling of the crop are doing the best they can, therefore, to discourage farmers, who have not hitherto grown the crop, from going into it this season.

And this is safe advice, for the usefulness of broom corn is exceedingly limited, and it is very easy to overdo its culture. The average crop will make about 28,800,000 brooms, while the total possible production of the area devoted to the crop would make about 57,000,000 brooms, so that new acreage is not yet needed, and tenderfeet will do well to let the stuff alone.

CULTIVATION AND SALE OF POP CORN.

Agricultural writers are agreed that it does not pay to raise popcorn on a large scale. A few acres well located and carefully tilled are likely to prove profitable, especially if they are near to a good market, but the supply is usually quite equal to the demand, and prices never rise very high. Cincinnati, Columbus, Chicago, Philadelphia and New York are the largest wholesale markets.

In New York prices vary from \$25 to \$40 per ton on the cob, and in Chicago from \$20 to \$35. The yield per acre will vary from 1,000 to 2,000 pounds, according to soil, cultivation and variety. Compared with Indian corn, the return per acre is usually greater, but it costs more to raise popcorn, as the plants must be given better culture.

Popcorn should not be marketed the same season it is grown, as it contains too much moisture, and unless the season is very dry it will not pop well. If kept in a dry place for a year it is usually much improved. The crop may be thoroughly ripened in the field and then husked out and stored in a dry place in barrels or bins, so arranged that mice or rats cannot get at it. Or, the corn can be cut, tied in bundles and stored in the field or on a scaffold in the barn until work is not pressing, when it can be husked at leisure.

The varieties most strongly recommended for market are the White Pearl and White Rice, the latter being small and rough and very desirable for home use. White Pearl is very productive and is

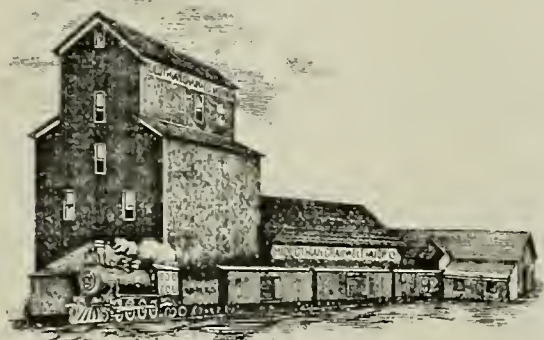
a standard market variety. A very prolific variety is called Golden Queen and is said to yield a profitable crop. Amber Rice is much like the White, except for its amber color. The yield depends somewhat on the size of the varieties, White Pearl and Mammoth Queen having large ears and being correspondingly productive.

Popecorn prices have averaged about $\frac{1}{2}$ cent a pound higher this year than last. The old corn is now on the market, and corn from the latest crop will be pretty generally held off until next fall. At Chicago in ear lots popcorn is selling at \$1.25 per 100 pounds for colored, mixed lots, up to \$1.50 to \$1.75 for straight lots, with extra fancy 8-row and rice corn \$1.50 to \$1.75, and Pearl \$1.75 to \$2. At New York, choice popcorn brings \$1.75 to \$2.

MIDLOTHIAN ELEVATOR.

Midlothian, Texas, is situated south and west of Dallas, at the southern angle of an isosceles triangle in whose other angles lie Fort Worth and Dallas respectively. The location is a fine one, being in one of the richest counties of the garden of Central Texas—in that country which many a man still up north and hustling for a living regrets he did not purchase in a solid block twenty-five to thirty years ago, when it was offered to him on bargain-counter terms. The elevator of the Midlothian Grain and Elevator Company might give such a one an inkling of the opportunity he then threw away.

The elevator is a well built structure of 75,000 bushels' storage capacity and facilities for handling



ELEVATOR OF THE MIDLOTHIAN GRAIN AND ELEVATOR COMPANY.

about 6,000 bushels of grain daily. It stands between the tracks of the H. & T. Central and G. C. & Santa Fe Railroads and has the Barnard & Leas Manufacturing Company's receiving separators and oats clipper.

The company is officered by W. W. Majors, manager; M. W. Hawkins, treasurer, and E. F. Aycock, secretary. It is a member of the Texas Grain Dealers' Association. The picture hardly does justice to one of the best elevators in Texas, but it is the best we have at present, and at least gives a fair idea of the extensive character of this business.

THE FORGED TELEGRAM.

Events of twenty-one years ago were brought vividly to the mind of many men in the grain trade by the recent publication of the following advertisement in a New York daily paper:

Telegraph Operators: Miss May Courtenay—\$250 will be paid to Miss May Courtenay, the person who, as telegraph operator, was in charge of the Atlantic & Pacific telegraph office in the Fulton ferry house on the evening of May 6, 1879, for the privilege of an immediate interview; \$100 reward will be paid for information as to Miss Courtenay's present whereabouts. Allan P. Lewis, General Delivery, Postoffice, New York City.

May Courtenay was the telegraph operator who sent the famous forged "Keene" dispatch that precipitated a panic on the Chicago Board of Trade in 1879. Just why an interview with her is desired at this time is not quite clear. It is probable that James R. Keene, who is living in New York and is very wealthy, desires to clear up the mystery of the sender of the message.

In 1878 James R. Keene organized a corner in wheat on the Chicago Board of Trade. Interested with him were Jesse Hoyt of New York, Perry H. Smith, George L. Dunlap and Nathan Corwith, of

Chicago, and J. G. Simmons and Judge Howe, of Kenosha, Wis. They began buying at 80 cents and kept on buying up to \$1, until by May, 1879, they held more than 16,000,000 bushels, and the price was still climbing.

Suddenly J. K. Fisher & Co., who were Keene's brokers on the Board, received a telegram signed "Keene," telling them to sell 3,000,000 bushels of wheat. Before Mr. Keene learned that any such message had been sent, the entire 3,000,000 bushels were dumped on the market. For a time the Board was in a panic and prices slumped heavily. Not until several telegrams had been sent to Mr. Keene did Fisher & Co. discover that they had been victimized by a forged message.

The losses by this forgery were estimated at \$150,000, which fell on the brokers and the members of the bull clique. May Courtenay, the telegraph operator, said that she had received the forged dispatch from a man whom she described as about 35 years old, stockily built, well dressed and wearing his hat pulled down over his eyes. The original dispatch was secured by Mr. Keene, who offered a reward of \$10,000 for the discovery of the man who sent it.

THE SIBERIAN PUZZLE.

The "doctors disagree" about Siberia. Every traveler come home has a new tale to tell. One sees in the new railroad coming disaster to the American farmer; while he who follows finds no cause for apprehension of Asiatic competition with American wheat growers. The reader can make the choice according to his temperament, his system of philosophy or the state of his liver. One of the optimists, however, is Wm. M. Bunker of San Francisco, who on returning recently from a long trip through Siberia, as a commercial traveler, said:

"I found no ground for the fear that Siberia will become a serious competitor in the matter of wheat. The fact is that the wheat in eastern Siberia is inferior. Even when grown from California seed it degenerates the first year. Thus far the Siberian railway has benefited the United States more than all Europe combined, with the exception of Russia, as we are supplying rolling stock, lumber and flour, and the road will continue to benefit the United States more than Europe."

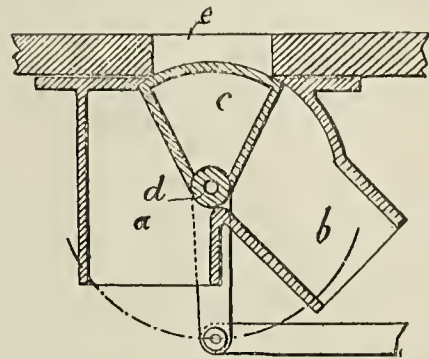
Per contra, the Prof. Carleton of the Agricultural Department at Washington, who has been analyzing Russian soils, finds that Siberia is as well adapted for wheat culture as is the American Northwest. The "black earth" lands of Russia and Siberia is a prairie country 600 to 700 miles wide, which begins in Hungary and extends eastward to the Ural mountains and beyond into Siberia for an unknown distance. This black soil is shown by both chemical and mechanical analyses to be similar, if not identical, Prof. Carleton says, with the "black loam" of the American prairies and of equal depth.

In a pamphlet on this subject by Prof. Carleton, the conclusion is reached, in substance, that "the soils of the two regions are similarly characterized by an exceptionally large amount of thoroughly humified organic matter, by the presence of an unusual proportion of phosphoric acid, and by a great amount of lime, potash, and other alkalies. These soils are, therefore, alkaline, while many others, especially of the forest regions, are acid. It is well known that the substances thus more abundant in these soils than in others are just those needed by the wheat plant. In these regions the amount of alkali present may become so great as to injure plant growth, forming alkaline wastes, but these are found in certain restricted areas near the border of the black soil region, and even in the vicinity of these wastes the best quality of wheat is sometimes grown."

A farmer living near Peru, Ind., says that he killed the Hessian fly in his wheat by sowing air-slaked lime on the field as soon as the grain was up in September. He spread the lime with a hand-sower, or fiddler, and repeated the dosage twice, making three sowings at short intervals.

VALVE FOR GRAIN BIN.

A recent French patent covers a new valve for the bottom of a grain bin, by which the grain may be



directed into one or other of two spouts. The valve *c* is pivoted at *d* to open the bin to throw its contents into the *a* or *b* spouts.

CYLINDER OILS FOR GAS ENGINES.

Experience has shown that gas and gasoline engines require not only a good grade of cylinder oil but an oil which is not perceptibly affected by frictional heat. What proves to be a first-class cylinder oil for steam engines will not necessarily answer for gas engines.

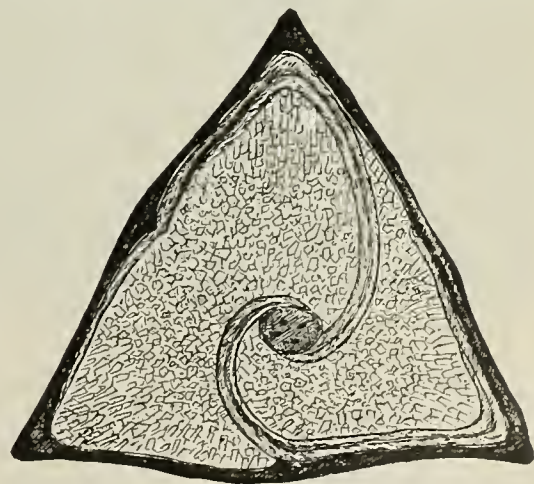
Oils which have a tendency to leave a coarse sediment behind, or form chips, should not be used, as they will cause clogging of the ports, sometimes sufficient to put the engine out of service.

Automatic sight feed lubricators should be used and it might also be well to attach a hand feed sight lubricator to be used in case of emergency. A regular feed of oil is even more important in a gas engine cylinder than a steam engine cylinder, for in the latter the steam assists greatly in carrying the oil to all moving parts.

Some cylinder oils of a good grade have been found to be too heavy for the cylinder of a gas engine. They would settle in a part of the cylinder and not distribute. In one such case, the addition of a light fatty oil improved its lubricating properties to such an extent that the same mixture was employed ever after. Where a gas engine manufacturer recommends a certain grade of oil, he generally knows what he is talking about and it is well to follow his advice.

A GRAIN OF BUCKWHEAT.

The three parts of the buckwheat berry, as shown by the cut reproduced from the Jones Dairy Farm's circular, are the hull (the heavily shaded outside), the embryo (the small disc in the center, with the curved parts extending to and along the inside edge



of the hull), and the starch grains (the light portion of the cut), which are white and make up the greater part (about two-thirds) of the berry. The hull is nearly all bolted out. The embryo is yellowish in color and has a sweet as well as strong "buckwheat" taste. It does not become fine in grinding.

The Prussian Grain Exchange at Berlin was reopened on February 16. It had been closed by law for two years.

H. W. CALDWELL & SON CO.'S NEW PLANT.

Nearly everyone connected with the practical side of the grain trade is familiar with the name of Caldwell, in connection with elevating, conveying and power transmitting machinery, and will be interested in a description of the new plant where this line of machinery will hereafter be made.

This new plant of the H. W. Caldwell & Son Co., located on Western Avenue, from Seventeenth to Eighteenth streets, Chicago, is easily one of the finest machinery manufacturing establishments in the world. As at present completed it consists of a power house 56x73 feet, the main machine shop 106x180 feet, and the rolling mill and sheet metal department 100x180 feet. Electrical distribution of power being employed, they were not hampered in arranging the buildings with reference to the greatest convenience in receiving raw material and delivering the manufactured products. A switch from the Belt Line Railroad brings cars in position for loading or unloading at every building. A plant calculated to most effectively and economically manufacture their line of specialties and general machinery was the chief aim of the company and wherever more than ordinary efficiency, convenience or permanence could be secured, the additional expenditure was not withheld.

The power house is a single-story building of brick and steel construction, divided into two rooms by a heavy fire wall. The boiler room is at present equipped with two 175-horse power Geary Water-tube Boilers, with provision for a third boiler of like capacity. Either boiler has capacity to supply the engine, thus making a shut-down unnecessary for the cleaning or repairing of boiler. After passing through a Bundy Steam Separator the steam passes into the engine room to supply a 16x36 Allis-Corliss Engine. This is of the "rolling mill type," having an unusually heavy frame and a fly-wheel of extra weight to secure uniform speed, even under greatly varying loads.

The engine room also contains an exhaust steam feed-water heater, two Stilwell, Bierce & Smith-

across the north end of the building is used for offices and drafting rooms and from them a view of the entire shop may be had.

The traveling crane used in this building is of the three-motor type, with a span of 48 feet and a capacity of 20 tons. It is carried on tracks high up in the building, so that it can be used for handling material to or from the galleries, as well as from the main floor. A novel feature of construction in connection with this crane is a provision for receiving and delivering material direct from the cars on tracks outside the building. Instead of running

large, as well as small, work may be had from the statement that it includes such machines as a large boring mill with a capacity for turning wheels 10 feet in diameter, a large planer, capable of taking a machine 8 feet square, and a keyseater, capable of cutting a keyseat in a hub 28 inches long.

The rolling mill and sheet metal department, 100x180 feet, also of brick and steel construction, houses the manufacture of the famous specialty of this company—the Caldwell Conveyor. A portion of the building is used for a rolling mill for the manufacture of the Caldwell Helicoid flight. The furnaces



GENERAL VIEW OF H. W. CALDWELL & SON CO.'S NEW PLANT.

the tracks into building under the crane, as is generally done, a substantial steel structure extends beyond the end of building and by an ingenious arrangement of the doors at the south end of building, the crane passes out of the building, pushing the doors before it, and receives its load directly from the car.

In addition to the crane, an electric elevator, with platform 9x18 feet, is located on the west side of building and is capable of carrying heavy loads of

are equipped with apparatus for using fuel oil, and are of the most effective and economical type. In this building are the forge shops, blacksmithing department and sheet metal working department for the manufacture of Caldwell Conveyor, etc.

The entire plant is heated by the Sturtevant hot-blast system of heating and ventilating, the heat being supplied by exhaust steam from the engine. In summer, the substitution of cold water for steam in the coils cools the air in the shops.



MACHINE SHOP LOOKING NORTH, OFFICES IN NORTH END OF GALLERY.

Vaile duplex feed-water pumps and a Lee-Penberthy Injector for auxiliary feeding of the boilers. The dynamo is of 100-kilowatt capacity, and the switch-board, meters and other apparatus are of the latest types. Power is transmitted by cables through conduits to the various buildings.

The principal building of the plant is the machine shop, with brick walls and structural work entirely of steel. The main floor is used as a general machine shop. The galleries on either side of the building are supported by heavy steel girders and are capable of supporting any weight that may be placed upon them. The east gallery is occupied by the pattern shop and the west gallery will be used for storage of manufactured goods until such time as the regular warehouse is erected. The gallery

material of any size to and from the gallery. The entire space through the center of building (48 feet wide) is kept clear of machines and is used for an erecting floor. The large tools are placed alongside this space, with special reference to having the heavier pieces of machinery delivered and taken away by the traveling crane.

A feature of the extensive lighting through windows and skylights that is worthy of notice is the glass containing wire netting. In addition to its fire protection, its ribbed surface causes a refraction of the rays of light that greatly increases the illumination of the interior. For night work the electric lighting system consists of 300 incandescent and 16 arc lights.

An idea of this shop's equipment for handling



PATTERN SHOP IN GALLERY OF MACHINE SHOP.

The use of electricity for the distribution of power to all departments has obviated the use of long lines of shafting. The machines are grouped so that all the shafts are short and have but few bearings. When any group of machines is out of use, the motor supplying that group is stopped and the operating expense of that part of the plant ceases at once.

In addition to the buildings above described, the company will build, at an early date, a foundry to the west of the machine shop, while to the south of the rolling mill and east of the power house, a large three-story warehouse will be constructed. This will be used as a shipping department and for the storage of large stocks of finished goods.

The Caldwell Company have selected as a location

for this new plant one of the best shipping points in the city of Chicago, and that is saying a great deal. It is in a locality that is rapidly becoming the leading manufacturing district of the city. In addition to having switching facilities over the belt railway, connecting with every railroad within the city, there are within a few blocks of the plant local freight depots of the P., C., C. & St. L., the Santa Fe, Michigan Central and the C., B. & Q. railroads. The many friends and customers of the company who desire to visit the new plant personally will find it readily accessible from the center of the city by several electric street car lines, as well as by the Douglas Park trains of the Metropolitan Elevated Railway.

STUDIES IN CORN.

In practical "university extension" work, of which we have heard so much during the past few years, nothing has yet appeared exceeding in potential value the work of the University of Illinois in the Illinois College of Agriculture, which is now devoting special attention to corn culture under the direction of Instructor A. D. Shamel.

The first step toward improved corn culture is to determine what is the best corn, or, rather, what are the best specimens of each of the several types

in spite of the usually accepted dictum that all corn is chemically the same. It has also been suggested by other than college observers that the seed should be adapted to the soil under cultivation. Speaking broadly it is said the farmer should plant "big corn on big (rich) land, little corn on little land, and medium corn on medium land." Big corn runs out—loses its distinctive character—on poor soil; so that no matter how big the seed corn the poorer lands yield only a certain size of corn. The thing to do then is to select the typical seed for each given tract—to improve the quality of grain that may be grown on the poorer lands and not to degrade the qualities of corn grown on the rich lands. (This is a theory advanced in the *Indiana Farmer*, by P. W. Corya of Dupont.)

The general principles of the art of judging corn by the score card method have been referred to in general terms in this paper hitherto; but we believe a more detailed statement of the methods will be of interest, if not of value, to the elevator man, who is, of course, a handler of corn rather than a producer. Every improvement of the quality of corn is indirectly of value to him, however. One who observes the method of judging corn for the first time soon becomes impressed with the fact "that much more must be known about an ear of corn and about how to use the score card than is

a single mixed kernel; it only means that a stray pollen from another variety has fallen on that silk.

"Ripeness is indicated by twisting the ear; when thoroughly ripe the ear is firm, but if the ear can be twisted it indicates immaturity.

"Roughness is a good indication, but when it extends to chaffiness at the ends of the kernels it is a defect. The long flanges of the kernels are formed by the seed coat which develops faster than the interior of the kernel, and at the end of the season falls back in upon the starch, leaving the dent. The longer seed coat gives room for the kernel to develop, but if the coat grows too long, making chaffy ends, there is a loss of energy and a poorer kernel. On the other hand in the flint varieties the interior of the kernel begins to harden on the outside, the seed coat cannot extend itself and the kernel can be no larger than it is when the starch begins to harden, resulting in shallow kernels. Rough corn if not chaffy will give a higher per cent of corn to cob.

"It will not do to pay too much attention to the filling out of the ear at the ends; in developing that to a perfect degree one is likely to lose some other quality more valuable. The butt of the ear should be swelled out over the shank and perfectlykerneled out; if the butt is straight across it is poor, and if it slopes forward from the end of the cob it is



ROLLING MILL—CALDWELL HELICOID CONVEYOR DEPARTMENT.



METAL STORAGE—SHEET METAL DEPARTMENT.

of this cereal now grown in Illinois. For while maize may originally have been of one variety only, now, because of culture and changed environment, many varieties are familiar. Instructor Shamel has, therefore, begun the work of improving corn culture methods by carefully differentiating the peculiar characteristics of each variety of corn, and has called to his assistance J. E. Meatheringham of Camp Point, who, in December last, took the first prize in the corn judging contest at the college. The distinguishing peculiarities of the types are at present known, it appears, only in a general way.

The study of type characteristics in this way would, of course, involve a score card for each of the various types; and the easy-going corn grower and buyer may ask: "What's the use of all this fuss?" The "use" is that the careful selection of seed corn by the general score card method has given a largely increased yield. In Douglas County, Illinois, as an example given by Mr. Shamel, in a single year "score card" seed gave an increase of no less than 20 per cent. An increase of ten bushels per acre on eighty acres means 800 bushels gain, worth at 25 cents a bushel \$200, all of which is net gain to the grower. How far this method may be of value when carried further into the detailed examination proposed by the typical score card remains to be seen, but there is presumptive value, at least. Few cereals respond more quickly to scientific culture than corn, both in yield and in quality, for the Illinois College has established the fact that the quality, the physical or chemical constitution, of corn may be materially altered by cultivation and selection of seed to develop special characteristics.

indicated in the few formal lines printed on the card itself," says the *Bloomington Pantagraph*. "The unwritten standard of the degrees of personal judgment to be exercised called for both class distinction and a liberal interpretation of the card. The matter is not yet reduced to a mathematical nicety;" but the following are some of the hints given by the expert instructors: "A white ear so badly mixed as to have a red cob should not be judged at all; a yellow ear must have a red cob, very few ears carry their size the entire length; a certain type of corn may taper more than other types, but its ears may be just as perfect as a whole; and too much must not be taken off for lack of this conformity to the standard as printed. An important detail is to have the length of the kernel at the tip of the ear as great as that at the butt; short kernels at the tip show an excess of cob.

"Scorers must get in mind the idea of type to be judged. A good specimen of a golden eagle ear is a poor specimen of yellow dent, and a good specimen of yellow dent is a poor specimen of the golden eagle type. The judge should look for a mixture of corn on the tips of ears; some kernels that are only stained or scarred may at first appear to be mixed. The ear of corn matures from the butt to the tip; if the silk at the butt is too early for the pollen of that variety it must be filled out with the pollen of some earlier variety; and if the silk at the tip is too late for the pollen of its variety, it must be filled out with some later variety if at all. It is easy to tell a mixture of white corn, but it is very difficult in yellow. Nothing should be taken off the grade for

very poor. But the balanced development of all the chief points of the ear must be sought.

"In judging the kernel, take out a kernel a third of the distance from the butt to the tip to see its shape, size and quality. The perfect kernel should really carry its size the whole length, and should be deep; it should not have a shoulder or taper rapidly to the tip. The flinty or more transparent part of the kernel at the end next to the cob contains the oils valuable in feeding; the opaque part is almost pure starch and worth much less to feed stock. The proportion of the one to the other should be noted, there being a great difference in corn.

"The portion of these ingredients of the kernel may be affected by the selection of seed, and a variety bred up for a special purpose having a great success of the desired ingredient. We should select seed to increase the flinty part of the kernel. One cannot tell the uniformity of the kernels by looking at the ear. A kernel with a narrow tapering tip will shell out easily."

Mr. Shamel is of opinion that the standard ear of corn should be 10½ inches long, instead of 10; but we believe the Corn Growers' Association has decided that the increase of length of the standard ear at this time would be premature. No doubt the change may be safely made in the near future, when scientific culture shall have so much improved the ear.

The east-bound freight from Chicago for the week of February 17 exceeded all past records, reaching 212,312 tons, of which 164,429 tons were grain.

BOARD OF TRADE MEMBERS INDICTED.

On March 1 the Federal Grand Jury, at Chicago, indicted five representatives of prominent Board of Trade firms on charges of bucketshopping. The men indicted are: James Nicol, vice-president of the Board; Henry O. Parker, former vice-president; C. A. Whyland, and Charles R. and Albert O. McLain, of the firm of McLain Bros. Messrs. Nicol and Parker were formerly members of the Bucketshop Committee of the Board of Trade. C. A. Whyland was expelled from the Chicago Stock Exchange a few months ago on charges of irregular trading. The McLain brothers were arrested last November on the charge of bucketshopping their trades and were released on bonds pending a hearing of their case by the grand jury.

The three newly-indicted men promptly gave bonds for appearance when wanted. They denied that they were in the least implicated in any dishonest practices. Messrs. Nicol and Parker said they were victims of "spite work" on the part of John Hill Jr., because of their opposition to his methods two years ago. At that time Mr. Hill's expense account as agent for the Board to suppress bucketshopping came up for consideration, and Mr. Nicol, who was a member of the directory, and Mr. Parker, who was a member of the finance committee, both disapproved of Mr. Hill's course in the matter of expenses. To this fact they attribute Mr. Hill's present course. Mr. Whyland will present a separate defense.

The charges are that the five men indicted devised a scheme to induce correspondents in several states to send money for dealing in future delivery in grains and provisions; that they converted this money to their own use without purchasing or selling on the Board, as they had agreed; and that they sent their correspondents false written reports of purchases and sales, purporting to show the prices at which and the persons to whom the sales were made. Postoffice Inspector W. S. Mayer and John Hill Jr., who are conducting the prosecution, declare that they have evidence to convict. Part of the evidence consists of printed statements sent out by the defendants showing the quantity of the purchase or sale, the time of delivery, the price and name of the persons to whom sold or from whom purchased. All five men were indicted jointly, three counts being returned against Nicol, Parker and Whyland, while six counts were alleged against the McLains.

When the case was called before Judge Kohlsaat on March 8, the five defendants pleaded not guilty to the charge of using the mails to carry on a bucket-shopping scheme. Their attorneys also made motions to quash the indictments. After hearing arguments on these motions the court overruled them and set the date for the joint trial of the defendants for March 22.

GRAIN IN SIGHT.

In the case of the complaint filed by Robert Wrigley of Ellis, Neb., against the Chicago, Rock Island & Pacific Railroad Co., the Nebraska State Board of Transportation gave a ruling on February 24 which is of interest to grain buyers. Wrigley, who is a track buyer, alleged that the railroad company had failed to furnish him cars for transportation of grain, but had furnished cars for that purpose to other grain buyers who had elevators or bins. During the hearing of the case it developed that the railroad company did not regard grain contracted for but not yet brought to the station as "grain in sight." There must be a carload of grain in wagons at the station ready for shipment before a car could be ordered, according to this ruling, which would effectually bar the track buyers, as was evidently intended.

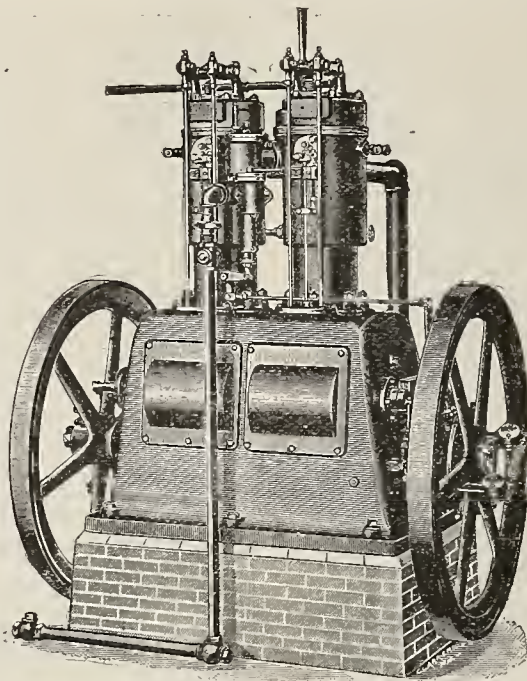
But the Board of Transportation decided that this was a discrimination against Mr. Wrigley, and issued an order compelling the Rock Island Railroad Company to furnish him all the cars that he may require for the shipment of grain. The order of the Board is that grain bought by a shipper, to be

delivered on the track on a given date, shall be construed as being "grain in sight" on that date.

WALRATH GAS ENGINES.

The Marinette Iron Works Mfg. Co. of Marinette, Wis., have recently added to their line of specialties the Walrath Gas and Gasoline Engine. They make this engine in various styles—single, double, triple and quadruple cylinders. The accompanying illustration is that of a 20-horse power double cylinder engine, known as Style D. The different styles embody the same mechanical principles and are similar in detail.

The bases of all sizes are cast in one piece. The single engine has two bearings for the crank shaft, while the double cylinder base has three bearings, and so on. The base forms a rigid pedestal for the engine, and a chamber for the lubricating oil. No cylinder oil is required, as the oil thrown against the pistons inside the base is sufficient. Before starting the engine the first time the oil well is filled up to the center of crank pin, when crank is down. An indicator on the front of base shows the proper height for oil, and any loss in this supply is made up from the oil supplied by cups on top of base, after passing through the bearings. Economy in oil is no small consideration, and in the Walrath



THE WALRATH GAS ENGINE.

Engine this is reduced to the minimum, and at the same time perfect lubrication is secured.

The vertical cylinders with water jackets are cast separately, and then fitted and securely bolted to the base. All cylinder heads are cast separately, so that in case of accident the renewal of entire cylinder or frame is not necessary. All parts are made strong and massive, and he who examines the engine, either casually or in detail, is impressed with a feeling of confidence.

The company employs no theoretical computations as to capacity of engines, but rates them at about 75 to 80 per cent of the total brake horse power developed under the test. They are thus enabled to guarantee their ratings.

Electric spark ignition only is employed. A small dynamo, attached direct to engine, is used. The storage battery is kept fully charged, and is employed when starting the engine until sufficient current is generated by the dynamo; then the battery is switched off.

Formerly gasoline engines were considered unsuitable for many classes of work, where great regularity was required, such as driving dynamos for electric lighting, etc. This objection, however, no longer holds good, at least not with the Walrath Engine. Its flywheel governor is positive, durable and sensitive in action. The flow of the mixture is regulated in the most economical manner, and a uniform speed maintained even with one cylinder. On the engines having two or more cylinders, alternating the working strokes, it receives an impulse at every revolution. Instead of skipping an explosion every now and then to maintain the speed,

as is usually done, the governor regulates the amount of the explosive mixture admitted for each charge and the engine receives an impulse every revolution whether it is running full load or light. This desirable feature makes a uniform speed possible without overloading the crank shaft with massive flywheels.

Those who desire to inform themselves further regarding this meritorious engine should write the manufacturers, whose address appears above.

BANKER MORGAN AND THE SMALL SHIPPERS.

The local committee at Chicago of the "small" shippers, of which John S. Carpenter is chairman, as a part of their campaign addressed a letter to J. Pierpont Morgan of New York City, asking his cooperation in their efforts to secure non-discriminating rates, and calling his attention to the disastrous effect on railway revenues of the present system of discriminations. Mr. Morgan's vast holdings of railway shares, and his active participation in their management from the financial side, made such a letter a quite proper one, and his reply was awaited by both the shippers and the public with not a little interest. For several days after its receipt it was withheld from publication by the committee, who told the inquiring reporters that it was entirely "satisfactory." It was, in one respect, but its recent publication, after many days of waiting, is attended with some disappointment. The letter is as follows:

New York, Feb. 17, 1900.—John S. Carpenter, Esq., Chairman, Chicago, Ill.: My Dear Sir—I am in receipt of your favor of the 10th inst., in respect to the alleged irregularities and discriminations in rates from Chicago.

Your committee will, I am sure, understand that the precise facts as to the rates charged, or any deviations therefrom by the carriers at Chicago, or elsewhere, are not within my personal knowledge; but no one appreciates more than I do the evils which, from discriminations of the character you indicate, result not only to the railway companies, but likewise to the public at large and to the shippers other than those illegally favored. Indeed, there can be little room for differences of opinion on this subject.

It was supposed that the enactment of the interstate commerce law would result in abolishing such discriminations by punishing not only the railway officials, but also the shippers who should participate in them. Unfortunately, however, no substantial results have been accomplished in this respect. The last report of the interstate commerce commission seems to recognize very clearly that the evil complained of exists to a serious degree.

No one interested in the welfare of the railways or of the commercial communities which they serve can advocate rate cutting or any other policy which gives one shipper advantage over another under like conditions. As already stated, the only parties who benefit from such a course are the favored shippers. The railway companies, all other shippers and the public at large must suffer. The remedy for the resultant evils, of which you justly complain, must be sought through an absolute publicity of all rates, and in the punishment of all who illegally continue to make them secretly or to benefit from them when so made.

The shippers who are discriminated against have it in their power, it seems to me, to lend material aid in this direction, not only to those charged with the administration of the law, but also to those railway managers who honestly desire to obey the law, and abolish all discrimination.

The law, unless enforced, must necessarily operate to put each company and each shipper in an attitude of distrust of all competitors, and the disastrous conditions which you describe are a logical result.

So long as violators of the law go free and the railway companies are also prohibited from coöperating among themselves in any way, however reasonable, to discourage such violations, there appear to be but two courses left to a railway company seeking to preserve its traffic against a competitor which is secretly and illegally cutting rates: One is to adopt the same illegal course; the other is to meet secret concessions by an open tariff.

The latter remedy is severe, but if judiciously applied, it ought, in the end, to be effective, and it is at least lawful. I doubt whether, under its application the losses to the railway would be any greater than those resulting from the demoralization of rates and of general commercial conditions under a system of illegal rebates and other discriminating devices.

Perhaps some other and more efficacious remedy will suggest itself to others. For my part I can only say that any proper effort looking to the con-

servation of railroad revenue and the protection of shippers, through the establishment and maintenance of uniform rates, will have my sympathy and support. Yours very truly,

J. PIERPONT MORGAN.

The committee's epistle to Mr. Morgan has not been without direct benefits, however, in other directions, for Mr. Carpenter, in an interview, published in the Record of February 20, said:

"The conditions now are almost unbearable, and something must be done to protect shipping interests. It seems that shippers all over this section of the country are imbued with the spirit of fight now. Since the local shippers sent that letter to J. Pierpont Morgan, in which they called his attention to the fact that discriminations against 'small' shippers and violations of the interstate commerce law were being made repeatedly, the movement for justice has been strengthened by the action of shippers' associations in many of the larger cities in offering their services to bring about the desired condition of affairs. The Interstate Commerce Commission heartily supports our movement, and a representative of that body has been in Chicago for some time offering suggestions and giving directions in matters pertaining to the conduct of our movement. The secret rate-cutting of the railroads in favor of the big shippers has been very disastrous to many of us, and if it is kept up much longer a great many will be driven out of the business. The big shippers get rates much lower than those offered to the smaller dealers, and of course that condition gives the big fellows too much of a handicap. The bill for amending the Interstate Commerce Act recently placed before the Senate by Senator Cullom, would give the Commission increased power, and that is what we want the commissioners to have. As matters now stand, the Commission in many ways is practically powerless. I doubt very much, however, if the bill will become a law this year. Those who do not desire to have the Commission further empowered have their influence, which is very strong."

THE AMERICAN MALTING COMPANY TO REFORM.

The expected has again happened; and a telegram from New York under date of March 3 announces that the American Malting Company has come into line for its share of Wall street "cussing." Wall street always uses swear words when it is disappointed—when some of its peculiar kind of "chips" are found to be floating around without a "banker" behind them. Considering how many "gold bricks" of one sort and another Wall street has managed to "float" in one way or another, in the last few years, one is sometimes surprised at the frequency of its lamentations and the vigor, however plagiaristic, of its bad language.

The American Malting Company paid eight quarterly dividends of $1\frac{3}{4}$ per cent each, and within fifteen days after paying the last one barely escaped legal process on account of its floating debt. It appears from the statement published on March 3 that at the end of 1898, after four dividends on preferred stock had been paid, there was a deficit in the earnings of \$189,143, but it was not then disclosed by the bookkeeping. However, four more dividends of $1\frac{3}{4}$ per cent each were paid next year, notwithstanding the deficit; but in November last a change in the directory was secured, and an investigation disclosed a deficit of \$799,986 in earnings, including payments of \$977,550 in dividends last year, and an additional allowance of \$400,000 for negotiating \$4,000,000 in bonds (5 per cent discount and 5 per cent commission) to pay floating debt, making a total deficit for the year in the profit and loss account of \$1,389,399. In November \$750,000 was advanced by certain shareholders to keep the company out of the courts, its credit having fallen so low that it could no longer borrow in the regular money market.

The committee making the report of March 3 says that when the company was organized, no statement was made by the promoters to the company of the amount the various malt houses cost them; that they simply turned over the properties and \$2,080,000 in cash to the company and received \$13,740,000 in common stock and \$12,500,000 in preferred stock; that the books of the company do not show any valuation for any individual plant; that while at the start the selling maltsters disposed of their malt, they retained their merchandise cash and book accounts, including bills re-

ceivable; that the maltsters then turned around and sold all their barley and malt on hand to the company, the latter obligating itself to pay for the same \$2,292,370, partly in cash and partly in notes, and also assuming obligations to carry out all the unfilled sales contracts of the said selling maltsters with their respective customers.

The new directory of the company, of which Chas. A. Stadler is president, will try to reduce the management to a business basis; and assuming that dividends should be earned before they are paid, the directory announces that "little or no profit need be expected for the eight months ending August, 1900, and that it would be visionary to hope for 7 per cent dividends on the preferred stock for a long time to come."

Joseph P. Ord is now treasurer of the company and C. A. Purcell first vice-president and general manager.

H. C. WAGNER.

The Milwaukee man best known to the milling and grain trade of Michigan is not a Milwaukee man at all, but a Wolverine through and through. And this is no paradox. Wherever in the trade in Michigan H. C. Wagner is known, and that is everywhere, he is officially from Milwaukee, being the



H. C. WAGNER.

representative of the Milwaukee Bag Company, but his home and headquarters are at Grand Rapids, a town he thinks quite good enough for anybody.

Mr. Wagner is only thirty years old, but he is getting to be an "old stager" in bags, having represented the Milwaukee Bag Company in the state for over four years, in the course of which he has traveled over it from end to end, made the acquaintance of about every elevator and grain dealer and miller and feed shipper in Michigan, who will all recognize in the portrait herewith the face of a familiar friend. The word friend is used advisedly; for so far as business-made acquaintances can become friends, in an approximate sense of the true meaning of that word, Mr. Wagner has the good fortune to number many in Michigan. His own disposition is sunny and optimistic. He overflows with good nature, which in a company becomes infectious. Everybody welcomes him coming and sees him go with regret. All of which tells in business; for few are willing to contest his claim of selling more bags than any other man traveling in Michigan.

The Grain Palace Association of Aberdeen, Minn., has decided, contrary to expectation, to hold an exposition as usual next fall.

Potato starch factories have been in successful operation in Maine, Minnesota and Wisconsin, where they consume all the small tubers not worth shipping. A similar factory is now talked of at Waterville, Wash., a famous potato country. Some of the adjacent lands are said to yield as high as 700 bushels per acre.

MILLING GRADES OF CORN.

Three new grades have been added to the corn classification of the Indianapolis Board of Trade. They are milling grades, for use in hominy and cerealine manufacture. The corn must be white, with no red grains in all three grades, the difference between them being in the plumpness, cleanliness and dryness of the grain. These new grades went into effect February 10.

The grain committee of the Board appoints the inspectors and listens to appeals from the ratings of the latter. It is said that not more than four disputes a year have arisen as to correct grading.

It is provided that the word "new" shall be inserted in each certificate of inspection of a newly harvested crop of corn until the 1st of January of each year. This rule practically establishes "new" and "old" grades for every grade of corn existing for the time specified. The inspector is required to make his reasons for grading grain, when necessary, fully known by notations in his book. In no case may the grade be made above that of the poorest quality found in any lot of grain which has been mixed or doctored for the purpose of deception. The inspection fee must be charged by the purchaser to the seller, and no rebate of such fee is allowed in any form.

The following are the grades of corn as now recognized on the Indianapolis Board of Trade under the new ruling:

No. 1 WHITE MILLING—Shall be white, sound, plump, dry and clean.

No. 2 WHITE MILLING—Shall be white, sound, dry and reasonably clean, but not good enough for No. 1.

No. 3 WHITE MILLING—Shall be white corn not dry or clean enough for No. 2.

No. 1 WHITE—Shall be sound, dry and well cleaned, and may contain not exceeding five per cent of colored grains.

No. 2 WHITE—Shall be sound, dry and reasonably clean, and may contain not exceeding five per cent of colored grains.

No. 3 WHITE—May be slightly damp and not clean nor sound enough for No. 2, and may contain not exceeding five per cent of colored grains.

No. 4 WHITE—Shall include all corn not good enough for No. 3, and good enough for warehousing, and may contain not exceeding five per cent of colored grains.

No. 2 WHITE-MIXED—Shall be sound, dry and reasonably clean, and may contain not exceeding fifteen per cent of colored grains.

No. 3 WHITE-MIXED—Shall be slightly damp and not clean nor sound enough for No. 2, and may contain not exceeding fifteen per cent of colored grains.

No. 4 WHITE-MIXED—Shall include all corn not good enough for No. 3, and good enough for warehousing, and may contain not exceeding fifteen per cent of colored grains.

No. 1 YELLOW—Shall be yellow, sound, dry and reasonably clean, and may contain an occasional kernel of other colors.

No. 2 YELLOW—Shall be three-quarters yellow, sound, dry and reasonably clean.

No. 3 YELLOW—Shall be three-quarters yellow, and may be slightly damp, and not clean or sound enough for No. 2.

No. 4 YELLOW—Shall be three-quarters yellow, and include all corn not good enough for No. 3, and good enough for warehousing.

No. 1 MIXED—Shall be mixed corn, sound, dry, plump and clean.

No. 2 MIXED—Shall be mixed corn, sound, dry and reasonably clean.

No. 3 MIXED—Shall be mixed corn, and may be slightly damp, and not clean or sound enough for No. 2.

No. 4 MIXED—Shall be mixed corn, and include all corn not good enough for No. 3, and good enough for warehousing.

SOUND EAR—Shall be sound, reasonably dry and fairly matured for the season.

NO GRADE—Shall include all corn not fit for warehousing.

Cincinnati reports an unusually big demand from the South for corn for feeding purposes.

Maine is not much in evidence as a corn state, and yet Maine's sweet corn, on the cob or from the cans, is hard to beat. Last season twenty-seven factories in that state packed 11,671,000 cans. There are about 100 factories in the state, all told.

KING CORN: A RHAPSODY.

BY W. T. DENNIS.

Cotton no longer rules the ring
For times have changed, and CORN is KING!
Corn and its products feed the world;
On high its banner is unfurled;
From Nova Zembla's icebound coast
To India, where they know no frost,
English, Irish, French and Spanish,
Russian, German, Greek and Danish,
With many more have learned to feel
And prize the value of good Corn Meal.
To high or low, to rich or poor,
A welcome guest at every door;
To each some blessing he imparts
To nourish them, and warm their hearts.
Then let Corn wear the crown imperial,
It proudly stands the matchless cereal!

King Corn it is whose grain nutritious
Makes our favorite Ham delicious;
King Corn it is that paves the way
And persuades the Hens to lay;
King Corn, therefore, humbly begs
Due credit for our Ham and Eggs,
But for King Corn, pray what the dickens
Would we do for our Spring Chickens?
Thanksgiving day, if bright or murky,
Owes to Corn its fattened Turkey.
And amid domestic scenes
'Tis Corn that gives us Pork and Beans,
And, unless I'm quite mistaken,
We owe to Corn our Breakfast Bacon,
While the task will not prove hard
To show that Corn makes all the Lard,
And all the good things found in swine,
From Sausage Meat to Tender Loin,
And, boss of Hog and Hominy,
He preaches strict economy.

While thus much time the King devotes
To Berkshire and to other shoats,
He ne'er forgets the festive Board,
But takes his place as honored lord.
Enthroned in state as King and Chief,
A monarch, Sir-Loin of Roast Beef,
His subjects are all served with care,
Each has his choice "well done" or "rare;"
But previous he regales the group
With bowls of steaming Oxtail Soup;
Meanwhile, the epicure or glutton
Finds juicy Chop or Leg of Mutton,
And his daily round of Hash,
Diversified with Succotash;
Corn Starch pudding crowns the feast
Of which King Corn was Grand High Priest;
And the henchman finds it is no joke
Should his Corn Cob Pipe be lost or broke.

Uncle Sam, when he settles up,
And gets returns from every crop
That is the product of the soil
And compensates the farmer's toil,
Finds that the largest net amount
Is credited to Corn account,
And thinks about the proper thing
Would be to say that *Corn is King*.

—Indiana Farmer.

COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade, on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

UNJUST TO SMALL SHIPPERS.

Editor American Elevator and Grain Trade:—I think that the action of the railroad companies in regard to carload minimums will work an injustice to small shippers more particularly than to large shippers. However, I do not think it is justice to either.

Yours truly, T. P. LELAND.
Newcomerstown, Ohio.

WILL HINDER THE SCOOPSHOVEL MAN.

Editor American Elevator and Grain Trade:—As to whether the action of the railroads in establishing high carload minimums is to the interest of the shipper or not, will say that, so far as we can see, it will not make any difference to the regular shipper, but it will be a hindrance to the scoop-shovel man.

Yours truly, McKEE & WALKINSHAW.
Blanchard, Iowa.

HAVE ILLINOIS DEALERS ANY COMPLAINTS?

Editor American Elevator and Grain Trade:—The Illinois Grain Dealers' Association wishes to make a vigorous crusade against short weights and unjust inspections, with which many of our members are troubled.

If any of our members have complaints, we would like to hear from them through our secretary, so we

can locate the trouble and use our best efforts to correct the evil.

Yours truly,
E. R. ULRICH JR., President.
Springfield, Ill.

PURCHASED ANOTHER ELEVATOR.

Editor American Elevator and Grain Trade:—We have purchased R. J. Riley's elevator at Symerton, Ill., and will take possession April 1. That will give us here a line of three elevators, located at Manhattan, Symerton and Ritchie. We are also members of the firm of Hargreaves Bros. & Brady, Culloni, Ill.

Respectfully yours,
HARGREAVES BROS.
Manhattan, Ill.

A LARGE CAR OF CORN.

Editor American Elevator and Grain Trade:—On February 9 there was unloaded for our account in the Keith Elevator, A., T. & S. F. car 7392, containing 105,860 pounds of corn, or 1,890.20 bushels. This car was shipped by Charles C. Davis & Co. of Laura, Ill., and we think it is the largest car of corn that ever came to Chicago. Who can beat it?

Yours truly, JAS. P. SMITH & CO.
Chicago.

LEGISLATURES SHOULD ACT.

Editor American Elevator and Grain Trade:—We believe the action of the railroad companies in fixing a minimum amount of grain to be loaded in cars regardless of capacity will be against the average country shipper. We think steps should be taken at once to bring this before the different state legislatures, and find out what does constitute a carload.

Yours truly, KOHL & EDEN.
Danforth, Ill.

MINIMUM CARLOAD IS SMALL ENOUGH.

Editor American Elevator and Grain Trade:—So far as we are concerned, the minimum carload is small enough, as it seems to have a slight tendency to keep out the scoop-shovel man. It can certainly work no harm to the legitimate dealer, as he can arrange with his receiver to accept as a carload the capacity of car. I know we have no trouble in doing so.

Yours truly,
LA CROSSE LUMBER & GRAIN CO.,
La Crosse, Kan. Per H. Dreany.

SHOULD BE UNITY OF ACTION.

Editor American Elevator and Grain Trade:—The matter of carload minimums is not one of any consequence at this point. Any serious difference of view in the trade, I think, should be regarded as an insuperable objection to any legislation proposed for and concerning that trade. It ought to prevent the initiation of such legislation, if not be a bar to its enactment.

Yours truly, E. W. McCLURE.
Hull, Ill.

NEW MINIMUM NOT A HARDSHIP.

Editor American Elevator and Grain Trade:—In my opinion the new minimum weight on grain shipments is a benefit to the shippers, at least in some instances, as it does away with bothering with very small orders. I have had one car on which I was compelled to pay for 4,000 pounds more than we could get in. On the whole, I don't think it a hardship for the shippers.

Yours truly, RAYMOND P. LIPE.
Toledo, Ohio.

LARGE MINIMUMS PREVENT SCOOP SHOVELING.

Editor American Elevator and Grain Trade:—We find that the loading of grain to the minimum capacity of cars, as specified by the railroads, is not going to work any hardship to the elevator man. The scoop shoveler, however, will have a hard time to load his cars. We have been working under this system for several years and we think it simply prevents irresponsible dealers from competing with the elevator men.

We do not handle much oats, but think there have been crops raised that would make it difficult

to get over 30,000 pounds in a 40,000-pound car. When such conditions occur, the railroads should adapt the minimum to the capacity of the car or enlarge their boxes to hold the oats.

Respectfully,
G. C. McFADDEN.
Havana, Ill.

MINIMUM IS VERY SATISFACTORY.

Editor American Elevator and Grain Trade:—One road makes a minimum on oats of 30,000 on a 40,000-pound car, and 40,000 pounds on a 50,000-pound car. If apparent that car has all that can be put in and it is not enough to make the minimum, then actual weight goes. On other grain, 2,000 pounds less than marked capacity.

This we find very satisfactory.
Yours truly, KINSELLA GRAIN CO.
Colon, Neb.

ACTUAL CAPACITY SHOULD GOVERN.

Editor American Elevator and Grain Trade:—In regard to minimum carload weights, will say that the railroads are wrong in charging the shipper for more than he can load into a car. I think if a car is marked to hold 40,000 pounds and a shipper can get in but 30,000 pounds, that is all he should be compelled to pay for. If he is compelled to do so it is like stealing money out of our pockets.

Yours truly, E. KIRCHNER.
Brooklyn, O.

MINIMUM RULE IS O. K.

Editor American Elevator and Grain Trade:—The action of the railroad companies in regard to loading cars is, in my opinion, O. K. and to the interest of the shipper.

Of course, it is unjust to the shipper if he has to pay freight on grain which he has not actually shipped. But this is on oats only; on all other grain it will be all right, and the shippers can stand a little hardship if it will suppress the scoop-shovel man.

Yours truly, FRED LIENAN.
Mt. Carmel, Ill.

CORN MUST GRADE AT POINT OF DELIVERY.

Editor American Elevator and Grain Trade:—In regard to the query of J. C. Besier & Co. in the last issue of the "American Elevator and Grain Trade," we think that while the firm might be right in their contention, yet, as the corn was sold for Newport News delivery they would have to accept the terms of the receivers at that point. The fact that the corn was graded at Indianapolis would make no difference, as the firm at the delivery point would have the final say as to its condition and grade.

SHIPPER.

PURCHASED AN IOWA ELEVATOR.

Editor American Elevator and Grain Trade:—On March 1 we purchased the elevator, office, cribs, machinery, business, and, in fact, everything owned by James Cook & Son of Blencoe, Iowa, and took possession on same day.

We expect to rebuild the elevator, spending something like \$1,500 on same, as soon as the weather will permit. We will continue to operate our elevator here, and have placed John Brown in charge of our interests at Blencoe, Iowa.

Yours truly, KINSELLA GRAIN CO.
Colon, Neb.

OPPOSED TO MINIMUM ON OATS.

Editor American Elevator and Grain Trade:—I do not think it a very fair deal on the part of the railroad companies to undertake to force a man to do something that is impossible and then charge him from \$3 to \$5 because he cannot do it, which is sure to be the case in this matter of loading oats unless the railroad companies change their rules. Take the oat crop in this part of the country in 1898, when some of them tested as low as 17 pounds to the bushel, and what then? Well, I suppose the car of oats would lack paying the freight and I could remit for the balance.

Some people seem to think that the present rules of loading would shut off the scoop-shovel man. That might do to tell to someone who don't know anything about loading cars, but the writer has had about 10 years' experience in that business

and knows something about it. A man can load a car just as full from the wagon as he can from the elevator; at least, I can.

In conclusion will say that I am very much opposed to the present requirements for loading oats.

Yours truly, ED. LEE.
Mellott, Ind.

HIGH MINIMUMS AND THE REMEDY.

Editor American Elevator and Grain Trade:—We think the minimums established by the railroads at present are in many cases too high. This is especially the case on oats, and on any kind of small grain when loaded in some of the older cars which are in service. Many of the old cars are unfit to load with grain at all, but, in any case, not above the top of the lining.

We doubt if it is necessary to secure legislative action on the subject. The traffic departments of most roads are inclined to be reasonable and liberal in the majority of cases, and we think, if the matter was properly presented to them, they would consent to make whatever concessions are necessary. We think this could be done best by the various grain dealers' associations.

Yours truly, J. G. MAXWELL & CO.
McPherson, Kan.

NO PROTECTION AGAINST SCOOP-SHOVELERS.

Editor American Elevator and Grain Trade:—In this state the railroad companies have fixed a minimum of 30,000 pounds on cars marked 40,000, and 45,000 pounds on cars marked 60,000, so we do not have any trouble in loading oats to the required minimum.

We all see why it is necessary that the railroads should have a fixed minimum for loading. But if in any case the minimum should be so high that the car would not hold the amount and the shipper was charged freight on grain he could not load in the car, it would be unjust.

There could be no benefit in this to the regular shippers of grain. The scoop-shovel man could put just as much grain in a car as the elevator man, so that on freight his loss would only be equal to the elevator man's, and in nine cases out of ten his other expenses are not as large, so that if, by loss on freight, the scoop-shovel man is forced out of business, there certainly would be no profit for the regular dealer. Therefore, I think the railroad tactics of this kind would be detrimental to all shippers and doubly so to all regular shippers.

Yours truly, C. H. LEAMAN.
Hillsboro, N. D.

A DISADVANTAGE TO SMALL SHIPPERS.

Editor American Elevator and Grain Trade:—As to the action of railroads in making a minimum amount of grain with which a car may be loaded, regardless of its capacity, we think such a rule is not in the interest of the shipper, nor is it just. The rule is applicable at large elevator points, where grain is plenty, but at country points, where only a limited amount of grain is to be secured at times, it does not work to the satisfaction of the shipper.

The increased capacity of cars retards a small shipper from forwarding his grain until he is able to load to the amount specified by the railroads. We have in our section of the country plenty of stations without any loading facilities, and have to depend on cars and quick loading to move the grain. When a large car is furnished, it will compel the shipper to pay freight on something that he does not have, as he may not be able to secure the quantity required.

I believe that the capacity of the car ought not to be considered at all, but a minimum weight be established, so that in case of any lack of grain it would give the railroads a fair load.

As to oats, it is almost impossible to load anywhere near the requirements, as they are light and chaffy, and the scoop-shovel man can load as many as the elevator man can, unless they are clipped or cleaned.

The grain business is going into the hands of a favored few of the many railroads of the country, and it will not be many years before a small dealer,

let him be regular or scoop, will be working for them by the day, if he wants to remain in the business.

Yours truly, H. A. KOSTER.
Platte City, Mo.

CANNOT ALWAYS LOAD TO MINIMUM.

Editor American Elevator and Grain Trade:—The rule of the railroad companies requiring dealers to load cars to a certain capacity with certain kinds of grain, as oats, for instance, is very unjust. Our experience is that very often this cannot be done and we are, therefore, paying freight for something we do not ship.

When a car is loaded as full as it can be loaded, as in shipping oats, it should constitute a carload. A shipper should be required to pay a minimum or full car rate only when he can load a car to the required capacity and does not do so.

We would be in favor of asking the Legislature to remedy this unjust requirement. That it works more injury than the scoop shovel man is our experience.

Very truly yours, A. F. SHOTTS,
Manager Grain Dept. Smith, Lewis & Co.
Keota, Iowa.

MINIMUM IS NOT TO INTEREST OF SMALL SHIPPERS.

Editor American Elevator and Grain Trade:—The position taken by the railroads in regard to minimum weights is no advantage to the smaller grain dealers, and in this part of the state affords but little protection against the scoop-shoveler.

With all small dealers it often happens that there will be large fractions of a carload left in a bin, with no other grain of the same grade left in the elevator. With the present demands of the railroad companies the dealer has to put something better or worse with the grain he has in the bin, or hold it for a long time, if grain is not moving rapidly. In putting in other grain with it, he cannot raise the grade by putting in better grain, but will lower it if he puts in poorer grain.

It does seem to me that the minimum weight to near-by points should be fixed at three-fourths of the capacity of the car. For New Orleans or New York it is all right to demand a load to full capacity, or as much as the car will hold. There is no justice in charging for more oats than the amount the car will easily hold.

Very truly ours, H. C. MOWRY.
Forsyth, Ill.

ARE INTERESTED IN THE TRADE.

Editor American Elevator and Grain Trade:—We always read the "American Elevator and Grain Trade" with a great deal of interest because we are interested in the trade and in the varied experiences which our brothers in the trade have.

All grain shippers are subject largely to the same experiences. Little annoyances are bound to arise between competitors. Farmers quite often will come to you and quote your competitor's prices, which are always a little more than you are paying. And in turn they will go to your competitor and quote your prices. They do this for their own benefit. In cases of this kind, if you have an honorable competitor, it is well to have an understanding as to prices. Then you live up to it and he will be convinced that it is a wise thing for him to do likewise.

Our local organization is doing much to relieve the troubles arising between local dealers.

The year 1900 opens up with new conditions which the grain shippers have to meet, for instance, the new classification, the advance in freight rates, the abolishing of the elevator commission paid by many roads for the benefit of a few at the expense of the many—thanks to the Interstate Commerce Commission.

The minimum weight of a car of grain is now 40,000 pounds, excepting for oats. Personally, we welcome this change, but can readily see a great injustice to the smaller shippers.

We have adjusted our business to these new conditions, but we are watching the struggles of some of our weaker brothers to get in line. We are rather inclined to think the railroad companies

should offer some relief now, since cars are plentiful, to the smaller shippers.

In our locality we have no trouble with feeders bidding on corn. There is plenty for all. We should judge that 20 per cent of our corn is fed from year to year by the producer. The other 80 per cent he sells, thereby giving the shipper a chance.

Respectfully, B. H. PALMER & SON.
Rockford, Ohio.

RAILROADS SHOULD FURNISH LARGE CARS.

Editor American Elevator and Grain Trade:—I think the present railroad rule as to loading cars is O. K., provided shippers can get cars that are capable of being loaded as ordered by the railroads. It is a poor rule that will not work both ways.

We should have protection in the case of light grain. We have no control of the seasons. The railroads seem to want a sure thing, and let us hold the bag. They should be forced to furnish us such cars as we may order if their minimum rules are to be enforced. I think it no more than right that the railroads should receive pay for 40,000, 50,000 or 60,000 pounds if a man orders a car of that capacity and does not load it accordingly. But to compel a person to load 40,000 pounds in a 30,000-pound car is outrageous, or, to make it plainer: To compel a man to pay on 35,000 pounds of oats when he could not get more than 25,000 pounds of oats raised in 1897 and 1898 into a car of 36,000 pounds. The oats here weighed 12 to 18 pounds per bushel.

Since this rule has been in effect, the railroads have put in as low as 30,000-pound cars. They will have to make a new ruling or quit using cars of that capacity. I ordered a 40,000-pound car; they put in one of 36,000 pounds. I could not fill my order, but that was the best they could do and I had to use it. But I have heard no kick yet as to not loading to 40,000 pounds.

Yours truly, J. R. MARTIN.
Allenville, Ill.

SUGGESTS A "GRAIN LINE" FOR CARS.

Editor American Elevator and Grain Trade:—We think the ruling of the railroads in regard to loading grain is very unjust to the shipper. We think all grain cars should have a grain line plainly marked clear around the car, one line for corn and rye, another for wheat and another for oats. This would give the shipper a gauge by which to load his grain. Many country elevator men, we are sorry to say, do not weigh out their grain at all. They load direct out of the bin and can only gauge the amount by the measurement rule, which may not come within 50, or perhaps 150, bushels of the correct amount.

So long as the elevator men maintain free storage for the railroad companies, they should not be compelled to pay freight on more than the cars will hold. If the shippers are compelled to pay this freight, which the railroads never earned or furnished cars for, then we are strongly in favor of enforcing the law to compel railroad companies to put in and keep in order track scales at every station shipping 100,000 bushels or more each year.

On the Vandalia Road we have a fine line of cars of 80,000 pounds' marked capacity, but it is almost impossible to load them to this capacity. The cars are strong enough to carry the 80,000 pounds, but it fills them to the roof and makes it hard work to load them. Again, there are times when the shipper takes a great risk in loading such large cars, for if the grade is off the loss is so much more on the large cars.

Whenever a railroad company makes a ruling it becomes a law until the shippers can get together all their friends and relatives and go to their respective representatives in the state legislature or the halls of Congress and get a law enacted to annul or regulate it. In short, we think this railroad rule unfair, and it needs the action of a disinterested Congress to establish a grain line system for cars and compel the railroads to put in and maintain track scales at all stations that ship, unload or transfer 100,000 bushels or more of grain

per year. Such points should also have a government weigher. This would be a benefit to the railroads and to the poor country shipper, who has to be responsible for all loss and shrinkage.

It should also be considered a criminal offense to unload grain in wagons at destination, and allow the cars to stand open for days accessible to the public pilferer.

Yours truly,
J. D. McLEAN & CO.
Decatur, Ill.

AN APPEAL TO REGULAR DEALERS OF OHIO.

Editor American Elevator and Grain Trade:—The attention of the officers and governing board of the Ohio Grain Dealers' Association has recently been called to the "scoop shovel" problem, which at this time seems to be more serious than usual, owing to the peculiar conditions now existing in the trade.

The Association is not strong financially or in numbers; only a small proportion of the dealers throughout the state are active contributing members.

The managers will try to compile a complete list of regular dealers of the state for the protection of regular dealers. To do so will involve considerable expense and great effort on the part of the secretary. As the Association does not employ a traveling man or pay a salary to any one of the officers, this list can only be made complete, effective and valuable through the assistance of every regular dealer throughout the state. The management therefore asks that every regular dealer in the state will constitute himself a committee of one to assist in this work. Send in your own name and also the names of regular dealers in your neighborhood, giving all proper information, character of business, location, shipping points, postoffice address, etc., and if you have irregular competition, give names and full information.

The better class of the firms engaged in track bidding, receiving and handling on consignment, located at the different grain centers in the state, also at the seaboard, will assist the work of the association by confining their dealings to regular dealers, but unless we furnish them with the necessary information, they cannot successfully afford the maximum protection to regular shippers.

Prompt action on the part of every regular grain shipper throughout the state will guarantee the object to be attained. Without your cooperation our plan will fail.

Address all information to me at 358 North High Street, Columbus, Ohio.

Yours truly,
J. W. McCORD,
Secretary Ohio Grain Dealers' Association.

RAILROADS SHOULD FURNISH RIGHT KIND AND NUMBER OF CARS.

Editor American Elevator and Grain Trade:—In regard to the action of the railroads in making a minimum amount of grain that shall constitute a carload, regardless of marked capacity, will say that I think the amount as it now stands (35,000 pounds) is about right, provided the railroad people will furnish the cars asked for. But at this season, when the cars are scarce, the dealer is sometimes compelled to load any old thing in order to keep his house in shape to do business. He often has cars given him which are of such low capacity that it is next to impossible for him to put in the minimum load.

In cases of this kind I think the present requirements are wrong, and that the cars marked 40,000 pounds should be filled as full as possible and accepted by the railroad at actual weight; or, make it as it was a few years ago—a minimum load of 24,000 pounds. This would be more nearly fair to the dealer, but, on the other hand, the man with the scoop shovel would have a better show than at present, when he is just about downed.

I believe it would be a good plan to ask the legislatures to adjust these matters in some way, so as to give the regular dealer a fair show.

Right along this line I would like to see something done toward helping the regular dealer get cars. For instance, he ships 100 carloads, or more,

per year, and a scoop-shovel man but one or two in the same time. The scoop-shovel man can get a car just as quick, and sometimes quicker, than the regular dealer, who does from 50 to 100 times the business. I have known cases where the agent would give the scoop-shovel man the preference, when, had he refused, the parties would have sold to regular dealer and the railroad would have received the same amount of freight and the dealer would have made his profit or loss, as the case might be. I am of the opinion that if this could be remedied it would be a boon to the dealer.

Respectfully,
W. H. McKINNON.
Eleanor, Ill.

WILL MEET AT COUNCIL BLUFFS.

Editor American Elevator and Grain Trade:—I am sending out the following notice regarding our forthcoming annual meeting:

Dear Sir:—The Grain Dealers' Union of Southwestern Iowa and Northwestern Missouri will hold their fourth annual meeting at the Hotel Grand, Council Bluffs, Iowa, Thursday, March 22, 1900. Afternoon session at 1:30; night session, 7:00 o'clock. Afternoon meeting will be devoted to business matters and election of officers. At the night session you will be entertained by papers and speeches. Every regular grain dealer, commission merchant, track buyer and railroad official will be welcome. You are all aware that this organization has been run in the interest of its members, and it is your duty to be on hand and help make this meeting a success. The movement of grain will be very light at this time, and you will have no reasonable excuse to keep you away. If you are dissatisfied with anything come out and make it known, as you are entitled to have a voice in the workings of this organization. Our success depends upon your support.

Yours very truly,
G. A. STIBBENS, Secretary.
Coburg, Iowa.

"JONES" GIVES HIS VIEWS.

Editor American Elevator and Grain Trade:—I have watched with interest the discussion of the various topics under the head of "Trade Rules Should Be Better Understood." The one which brings out the question of "What constitutes a legal delivery?" comes especially near home, as we are supposed to be "Jones," who sells Smith 5,000 bushels corn, Decatur terms, Smith being a commission merchant doing business in Indianapolis.

In the first place, the question has not been properly stated nor the details set forth which have a bearing on the subject matter. The question is this: Smith, a commission man residing in Indianapolis and having an agent in Decatur, also having a transfer elevator, leased at Decatur and run by this agent, buys, through this agent, 5,000 bushels of No. 3 corn of Jones, on track at Jones' station, and confirms same, stating in the confirmation that said grain shall be Decatur terms; i. e., Decatur weights and grades. Then, according to law, this confirmation is the only contract which exists between Jones and Smith. Smith then sent Jones billing instructions as follows: Bill 5,000 bushels of No. 3 corn to Smith at Indianapolis, via Decatur for weighing and transfer through the elevator operated by Smith's agent. Now, Smith's billing instructions violated his contract with Jones by not providing for inspection on the bill of lading.

Had Smith ordered Decatur inspection in his billing and Jones had neglected same, then Jones would have been at fault. Had Smith ordered his billing according to his confirmation, the railroad company would set all cars so billed on the inspection track, and there being a state inspector at Decatur, his duty was to furnish the consignee or his agent with the certificates of inspection. Or, sometimes the inspector furnishes them to the railroad company, which collects the fee from the consignee when collecting the freight, and it is the custom for the consignee to return the inspection certificate to the consignor and charge same to the car on which it was collected.

When Jones found that Smith did not contemplate giving him Decatur inspection, as the billing instructions from Smith omitted that, he notified the state inspector of car numbers and ordered railroad company to set them on inspection track at Decatur. This was done, except in the case of

one car, which escaped without inspection, but this car graded according to contract at Indianapolis, and all the cars which were inspected at Decatur graded according to the confirmation. Inspector Harlan sent Jones the certificates, and he held them, for they were his, he having paid for them.

Smith sent Jones account sales, with several cars reduced in price because they did not grade in Indianapolis. Jones replied: You were to give us Decatur terms; we had no contract to deliver you any grain Indianapolis terms, and your billing instructions violated your contract. Furthermore, we (Jones) protected ourselves by doing that which your confirmation said you would do—give us Decatur terms—and if you desire to see Decatur inspection on these cars, we have them. All graded contract at Decatur, except car which escaped as above related.

Now, I don't agree with Secretary Tyler, although he has wide experience and knowledge in these affairs. Custom is not always law. But it does not look reasonable that Jones should furnish Smith weights and inspection; it is not custom, for it is customary for the buyer to furnish the shipper weights and grades, although the seller pays for both. This work is usually done where Smith or Smith's agent is located.

I hold that the legal delivery of grain sold by Jones to Smith is, in this case, the delivery of the bill of lading according to the confirmation or the other dictations of Smith, and Smith's acceptance and payment of draft against same is his acceptance. If Smith refuses to pay draft or accept grain, Jones has recourse by law for violation of contract. If grain misgrades according to the terms of contract where it was to be inspected, or falls short in weight, then Smith has recourse by law against Jones for non-fulfillment of contract. But grain sold on track at country stations does not imply nor express the delivery of inspection certificate or certificate of weights. Custom has established that the consignee shall furnish consignor with these, but that the consignor shall pay for same. This custom is so well established that many firms now will not pay drafts nor accept bills of lading from banks until the arrival and inspection of the grain.

The delivery of grain from public or private elevators, of course, must be different. The amount and grade must be stated in the warehouse receipt, and this is considered by board of trade rules as a legal delivery.

Referring further to Mr. Tyler's remarks: He says the seller should have notified the parties in Decatur who handled this grain that certificates were desired. Now, Tyler is wrong. If Smith had wanted Decatur inspection he should have given Jones different billing instruction, and should have stated in his billing instruction to Jones that grain should be inspected and weighed at Decatur, but Smith told Jones to weigh and transfer at Decatur. Then, to further prove Smith did not want Decatur inspection, Smith's agent, who bought this grain, was the party who handled this grain at Decatur and knew, or ought to have known, how it was bought, for we signed and returned to this agent of Smith a duplicate confirmation, which specified Decatur inspection. When Jones saw this violation of contract, he procured inspection as a double guarantee against possible loss for Smith's violation of contract.

I am, one who understands some of the rules of trade,
"JONES."

The Argentine in the calendar year 1899 exported 64,500,000 bushels of corn and 882,167 bales of hay. England took the largest quantity of corn and Cape Colony the largest quantity of hay.

Last year's bean crop was short nearly a million bushels. And now the news comes from Europe that the crop there also was short and that stocks are very low. Big shipments in the fall to Cuba and Porto Rico brought down the Boston stocks, and that city is now thoroughly alarmed at the prospective disappearance of its peculiar Sunday morning breakfast.

Court Decisions

[Prepared especially for the "American Elevator and Grain Trade" by J. L. Rosenberger, LL. B., of the Chicago Bar.]

Indication that Shipper Did Not Intend to Give Credit.

Where a firm in the milling business, upon shipment of a carload of wheat that had been sold, took therefor a bill of lading showing that the wheat was consigned to itself, which the firm indorsed in blank and delivered with a draft to a bank for collection, the Supreme Court of Michigan holds (W. & A. McArthur Co., Limited, against Old Second National Bank, 81 Northwestern Reporter, 92) that this was a clear indication that the shipper did not intend to extend credit, and that the presumption that it was a cash transaction was not negatived by the fact that the draft was entitled to three days' grace. Therefore the court holds the bank liable for surrendering the bill of lading when the draft was merely accepted, without being first paid, so that insolvent parties got the wheat, and the draft was never paid.

When Personal Liability Attaches to Warehouse Stockholders.

Where grain is deposited for storage with a corporation, organized under Title 2, Chapter 34, of the Minnesota Statutes, for the purpose of building or leasing and operating elevators and warehouses, etc., which corporation is engaged as a warehouseman in storing grain for hire, and such grain is wrongfully disposed of by the fraud, unfaithfulness or dishonesty of the directors, officers or members of the company, the Supreme Court of Minnesota holds (Rice against the Madelia Farmers' Warehouse Company, 80 Northwestern Reporter, 853) that the owner suffers a loss peculiar to himself, which entitles him to maintain an action against such directors, officers, or members, under another statute of that state, namely, under Subdivision 3 of Section 2600, General Statutes of 1894.

Implied Waiver of Lien.

In the case of Peterson against the St. Anthony & Dakota Elevator Company, where it appeared that the owner of a chattel mortgage authorized and requested the giver of the mortgage to haul away the wheat covered by the mortgage, and sell the same and pay him (the owner of the mortgage) with the proceeds, the Supreme Court of North Dakota holds (81 Northwestern Reporter, 59) that such consent to a private sale of the property operated as an implied waiver of the lien of the mortgage, whereby the mortgage was defeated. Of course, the court says, a mere consent to a sale, not acted upon in any manner, would not operate as a waiver. The crucial test here was whether the holder of the chattel mortgage authorized the debtor to sell the property at private sale, and whether, after such authorization, such sale was actually made.

Is Gambling on Futures Ground for Attachment?

In the case of the Cleveland National Bank against Bryant and others, it was said that one of the parties to the suit, whose property had been attached, had been dealing in futures in wheat and grain on the Chicago Board of Trade, and that losses sustained in those speculative ventures produced his insolvency and inability to pay his debts. This fact appearing in the evidence, the chancellor based his decree sustaining the attachments upon it; holding, in effect, that a debtor, in speculating in futures on boards of trade, was guilty of a fraudulent disposition of his property, in such sense as to justify his creditors in swearing out attachments against his property.

This suggests an interesting legal question. Unfortunately, however, the decree referred to does not itself throw any particular light upon it; or whether, in fact, such was the holding; and the Court of Chancery Appeals of Tennessee evades a decision upon it, stating (54 Southwestern Re-

porter, 73) that it was not necessary for it, in this case, to hold and decide that gambling in futures on the Chicago Board of Trade is of itself sufficient to establish the charge that a person was fraudulently disposing of his property, in a sense to authorize under the statutes the issuance of attachments against his property at the instance of creditors. The reason given is, that there were sufficient other facts and circumstances shown in this case to sustain the conclusion that the issuance of the attachments was warranted, without considering this ground.

What Railroads Sold Hay for Not Material.

A party agreed to sell and deliver to a firm three carloads of timothy hay, at \$15 per ton. Either nothing was said about its quality or it was agreed that it should be No. 1 old timothy hay, or choice old hay. The firm received the first carload and paid for it. The two other carloads were sent to the firm, but the latter refused them, alleging that the hay was not of the quality ordered. The railroad company finally sold the hay for its charges. The seller sued for the purchase price of the two carloads, and obtained a judgment. What the agreement was as to quality, and whether the hay corresponded with the quality agreed upon, was, Supreme Court of New York holds, for the jury to determine. As a part of the defense, an effort was made to prove what the railroad company sold the hay for, but the trial judge would not permit this. And this ruling, the court holds, was proper. It says (Carey against Baldwin, 61 New York Supplement, 581) that if the firm ought to have received the hay, then the seller was not answerable for the railroad company's sale of it.

COMMISSION MEN'S CONGRESS.

The general opinion of those who attended the sessions of the convention of board of trade representatives at Chicago last month is that the meeting will result in appreciable benefit to the commission trade as a whole. The convention was attended by the following delegates:

Chicago Board of Trade—W. S. Warren, R. S. Lyon, H. F. Dousman, L. W. Bodman, A. M. Day, W. S. Jackson, J. H. Milne, R. G. Chandler, W. H. Chadwick, P. B. Weare, C. L. Raymond.

New York Produce Exchange—William H. Hamilton, D. M. Van Vliet, Frank I. Maguire, John Valient, John J. D. Trenor, Daniel F. Engs, H. A. Day.

Peoria Board of Trade—R. C. Grier.

Indianapolis Board of Trade—L. S. Gordon, F. P. Rush, Edgar H. Evans.

Detroit Board of Trade—William Carson.

Kansas City Board of Trade—Joseph Bookwalter, H. C. Reed.

New York Consolidated Exchange—L. V. De Forest, M. E. De Agnero, Thomas H. McGrath, M. H. Wagner.

Toledo Produce Exchange—W. H. Morehouse, F. J. King.

Pittsburg Stock Exchange—W. I. Austin, E. A. Masten, George L. McFarlane, Charles P. Walker.

Duluth Board of Trade—George Spencer, G. G. Barnum.

Milwaukee Chamber of Commerce—F. H. Magdeburg, Wallace M. Bell, G. H. D. Johnson, Alexander Schmidt.

St. Louis Merchants' Exchange—Fred C. Orthwein, H. F. Laugenberg, R. P. Annau, Bert H. Lang, R. F. Walker, George H. Morgan.

Minneapolis Chamber of Commerce—C. M. Harrington, E. S. Woodworth.

C. L. Raymond of Chicago was made chairman and Geo. H. Morgan, secretary of the St. Louis Merchants' Exchange, secretary.

The call suggested concerted action to put down bucket shops and to adopt a minimum rate of commission. An organization having been perfected, a resolution by R. S. Lyon of Chicago was offered and adopted providing for the appointment of three committees composed of one member from each exchange represented, one committee to consider the matter of a uniform commission rule; a committee on bucket shops and bucketshop legislation; and a committee on collateral subjects. The convention then went into executive session, which continued until final adjournment.

The deliberations of the convention cannot, there-

fore, be published, except the net results, which appear in the following resolutions:

ON FUTURES.

Whereas, Trading for future delivery has in recent years resolved itself into conditions which have resulted in practically but four deliveries during the entire year; and,

Whereas, Sales for delivery at a time beyond the period of 90 days have encouraged illegitimate methods of trading, and have been of great assistance to "bucket shops," who dread actual deliveries as a child dreads fire; and,

Whereas, These long-time sales take the life out of the market and also take away from it the influence of legitimate cash transactions and tend to unnaturally depress values of agricultural marketing on which the general commercial prosperity in a special sense depends; and,

Whereas, The nearer our trading can be brought to an actual cash basis the more satisfactory it will be to the trade at large and to the business of the country generally; therefore,

Resolved, By this convention, that action be taken looking to the abolition of sales of long deferred futures and to the establishment of a common rule limiting such sales to a period not exceeding 90 days.

ON PRIVILEGE TRADING.

Resolved, That the commercial exchanges here represented be requested to give their moral support to the Chicago Board of Trade and to the St. Louis Merchants' Exchange in their efforts to suppress privilege trading on their own floors.

ON COMMISSIONS.

Resolved, That it be the sense of this convention that a uniform rate of $\frac{1}{8}$ of 1c per bushel on grain futures be charged non-members by the various exchanges here represented; but to resident members of trading organizations in other markets now regularly established and doing business, not less than 1-16 of 1c per bushel.

ON BUCKET SHOPS.

Resolved, That the matter of obtaining national "bucketshop" legislation be referred to a standing committee of five, to consist of the presidents of the following exchanges: New York Produce Exchange, St. Louis Merchants' Exchange, Toledo Produce Exchange, Minneapolis Chamber of Commerce, and the Board of Trade of the city of Chicago.

Resolved, That in the opinion of this convention it would be well for all the exchanges to enact and enforce such rules as will put a stop to "bucketshopping" methods and connections among their own membership.

The bucketshop problem is a much more serious one than surface indications would suggest, and the way out of the mire is not so simple as one might hope. The committee, so "leakage" from the convention hall says, was not entirely agreed on a plan of procedure; and this difference of opinion appeared more clearly when the convention as a whole took up the committee's report. The root of the evil was thought to be the Western Union Telegraph Company, which supplies bucket shops with quotations; and a plan was proposed to appeal to Congress for amendments to the postal laws to declare the bucket shop illegal, as was done in the case of the lottery some years ago, and so bring the whole thing under federal jurisdiction and control. The legal difficulties of the question, however, were found to be considerable, and finally the resolution on the subject quoted above was adopted, dumping the problem and a plan for its solution on the committee of five.

The social side of the meeting centered in a banquet at the Grand Pacific Hotel on the evening of February 13, tendered by the Chicago dealers. There were no set speeches, but President Warren of the Chicago Board of Trade, when the cigars came in, called on several gentlemen to "talk shop," which they did to the satisfaction of all present.

D. C. Shepard, Medina, Ohio: I have not received the February number of the "American Elevator and Grain Trade." Please forward it, as I cannot keep house without it.

Crowley, La., which now has five rice mills in operation, will have another ready for cleaning rice of next crop. It will be built by the Star Rice Milling Company, Limited, made up of New Orleans and Crowley capitalists. W. W. Dusan is president, J. C. Morris of New Orleans vice-president and A. B. Allison, Crowley, secretary and treasurer.

NEW SYSTEM OF GRAIN HANDLING AT BUFFALO.

Important changes are to be made in the method of shoveling grain at Buffalo for the coming season. The contract system has been so unsatisfactory in the past that it finds small favor in present considerations. The weight of opinion seems to be in favor of adopting an entirely different system. A meeting of the Lake Carriers' Association will be held at an early date to decide on a definite plan of operation.

One plan which has been proposed is to go back to the old system of having the railroads and elevators handle their own grain. This plan does not find much favor. The plan which will probably be adopted is to appoint a superintendent to act for the Lake Carriers' Association instead of a

falo members of the Lake Carriers' Association and will probably be adopted.

Thomas W. Kennedy, superintendent of the Philadelphia & Reading Coal & Iron Company, is said to be the choice of the committee of the Lake Carriers' Association for superintendent. But President McMahon of the Buffalo union is quoted as saying that Kennedy would not be acceptable to the International Longshoremen's Union.

VALUE OF LOCAL ASSOCIATIONS.

There is nothing that has ever been attempted by an association, and I am familiar with the workings of several, that has so nearly brought relief for all the evils attending the grain trade as the local or division meetings of dealers, said A. H. Bewsher of the Nebraska Association, writing to Secretary

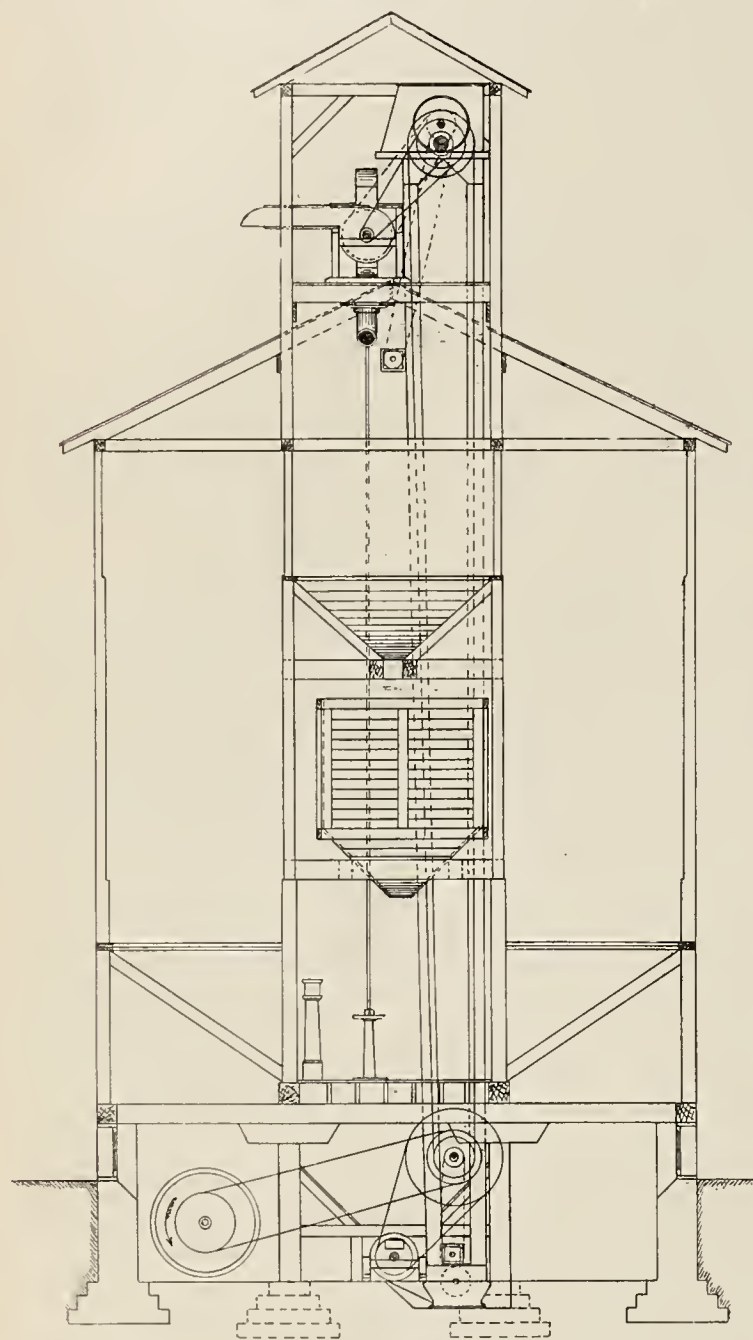
will more than repay him for the few hours he is occasionally expected to devote to these meetings.

A MODERN 25,000-BUSHEL CORN ELEVATOR.

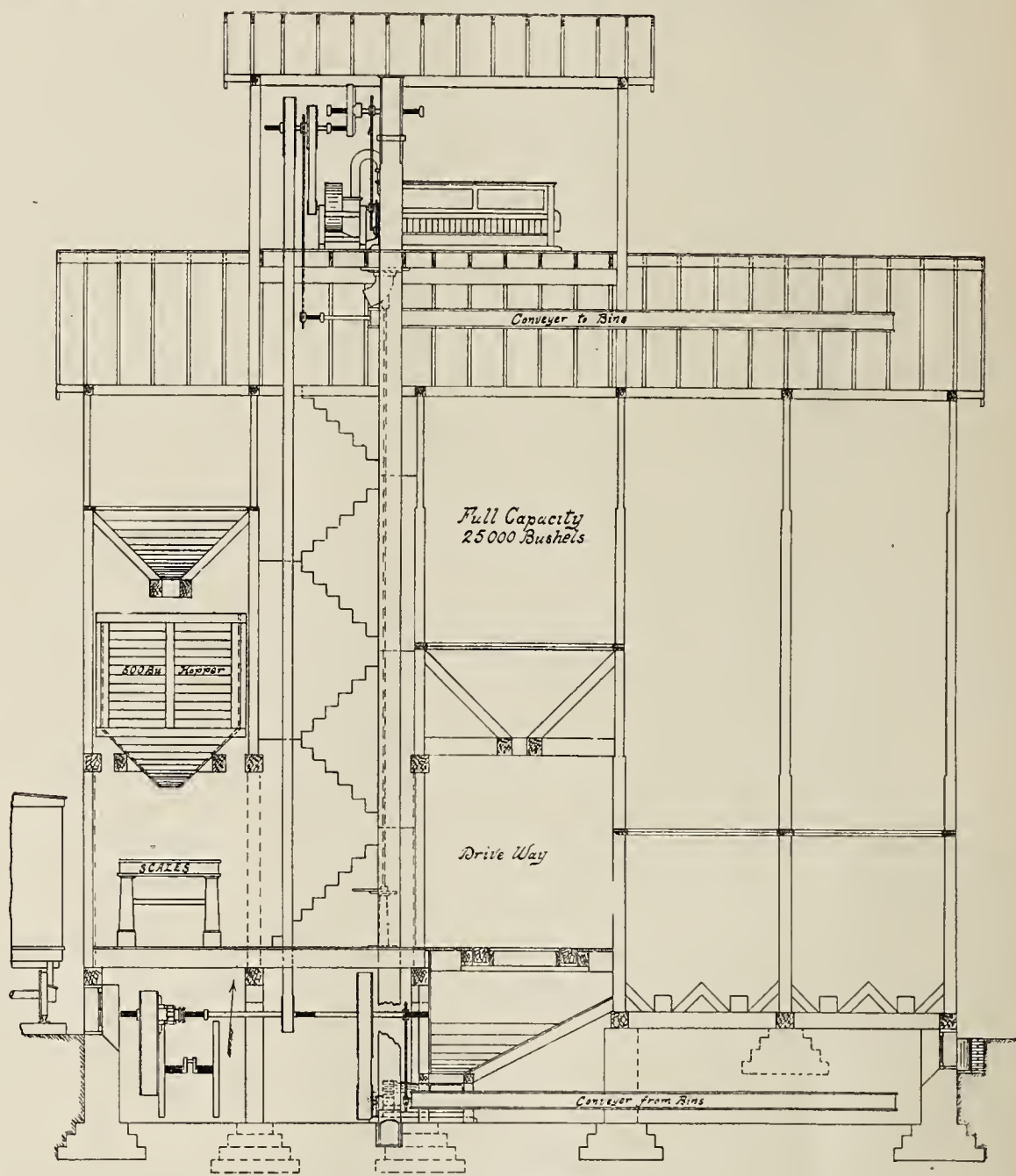
BY AUSTIN B. HAYES.

The illustrations herewith given are of a 25,000 bushel elevator for corn. The building is 30x50 feet on the ground, with a 10-ft. basement. The walls are 24 inches thick, with 12x12-inch sills, posts and girders. It is 32 feet from the working floor to top of bins; 8 feet to the floor of cupola, and 10 feet to plate of cupola, with a 3-foot pitch to the roof.

The bins are built of 2x8-inch, 2x6-inch and 2x4-inch cribbing. The rafters over the elevator proper



Cross Section.



Longitudinal Section.

END AND SIDE SECTIONAL PLANS FOR A MODERN 25,000-BUSHEL CORN ELEVATOR.

contractor. In other words, the contract system is to be abolished and the business is to be handled directly by the lake carriers, through their own superintendent. The adoption of this plan now seems to hinge on the selection of a superintendent who shall be acceptable to all interests.

The plan is simple. The lake carriers are to pay the men \$2 for each 1,000 bushels, and to the owners of the steam shovels \$1.20 for each 1,000 bushels. The superintendent appointed by the lake carriers is to be satisfactory to the officers and men of the 'Longshoremen's Association. He is to have charge of the work, and his force of assistants in the employ of the lake carriers are to obey him and work in full harmony with the men. The superintendent is to receive a salary of \$5,000 or \$6,000 a year, paid by the lake carriers out of funds entirely apart from the \$2 on each 1,000 bushels paid to the men. The men are to be paid in person. There are to be no saloon payments, no middlemen, no contractors, no contract bosses. This plan is said to meet the approval of the Buf-

Tyler of Decatur. Before any reform can be attempted, united action must be had, and, before this can be obtained, friendship must exist. The feeling of confidence and friendship amongst the dealers we feel to be the keynote to our work. It is true we have had the hearty sympathy, support and coöperation of all of the dealers in the state. This is necessary. Every member of an association and every member of a division must feel that he is as much responsible for the success of that division as anyone. If he finds a neighbor becoming indifferent, it is his duty to go to that neighbor, pour into him some hot stuff and show him the advantage of attending meetings, even though it may inconvenience him to do so. The meeting is held as much for his benefit as for that of anyone else in the division. Because he has no complaint to file is no reason why he should remain away from the meeting. His neighbor may have some complaint against him that may need explaining, and even though he has not, matters will arise, subjects be discussed and information be asked and given that

are 2x8-inch, and 2x6-inch rafters over the cupola.

The ear corn is received, weighed and dumped by a controllable wagon dump scale of the Love & Savage make, to a sink beneath, which is large enough to hold three wagon loads. The sink is directly over the sheller. The sheller is a No. 1 Western Corn Sheller of 1,000 bushels' capacity. The shelled corn and product are elevated to a No. 1 Western Corn Cleaner, cleaned and distributed to the bins by a turn-head, or by-conveyor, to the four large bins. When it is wished to ship grain, it is drawn from the large bins by a conveyer located in a tunnel under the bins, or from the smaller bins by spouts, re-elevated to a 500-bushel hopper scale, weighed and delivered to cars.

The three bins over the driveway are used for exchange purposes. All drive-belts are of leather, with an external gear-drive to the elevator-head and ring oiling-boxes throughout. The power required is a 25-horse power gasoline engine, using a friction clutch pulley for driving the machinery. With

such an elevator one may have many advantages in operating that are not found in most country elevators.

THE SMOOTH COMMISSION MAN.

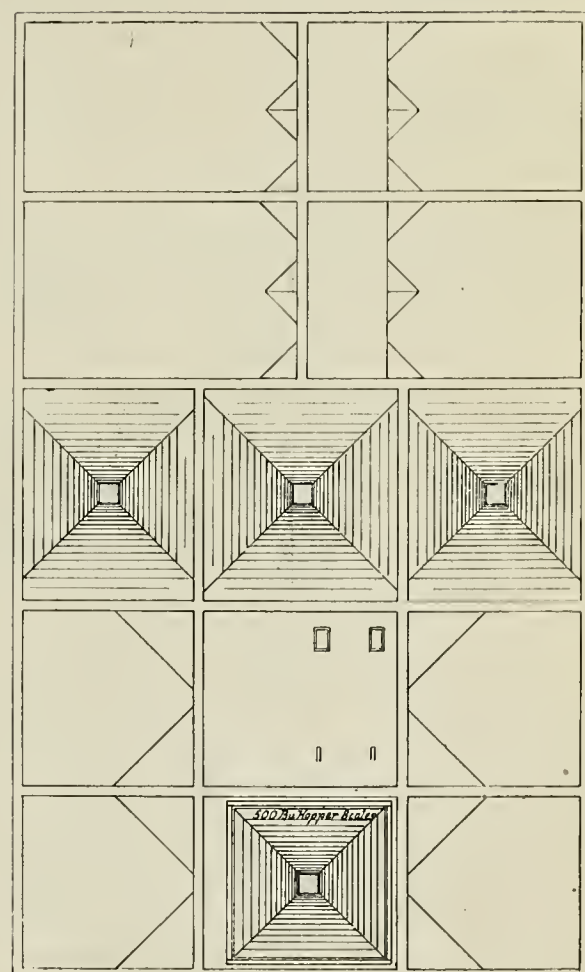
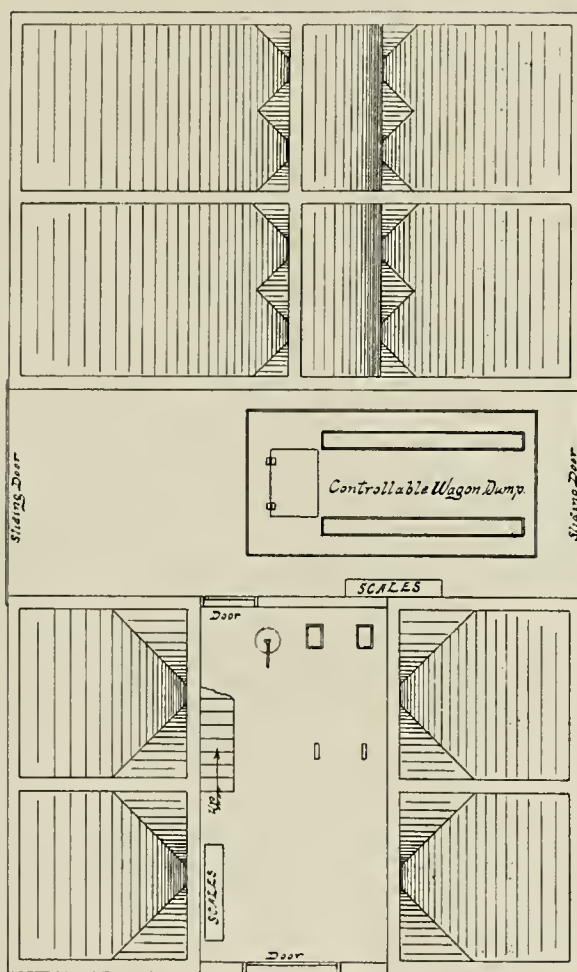
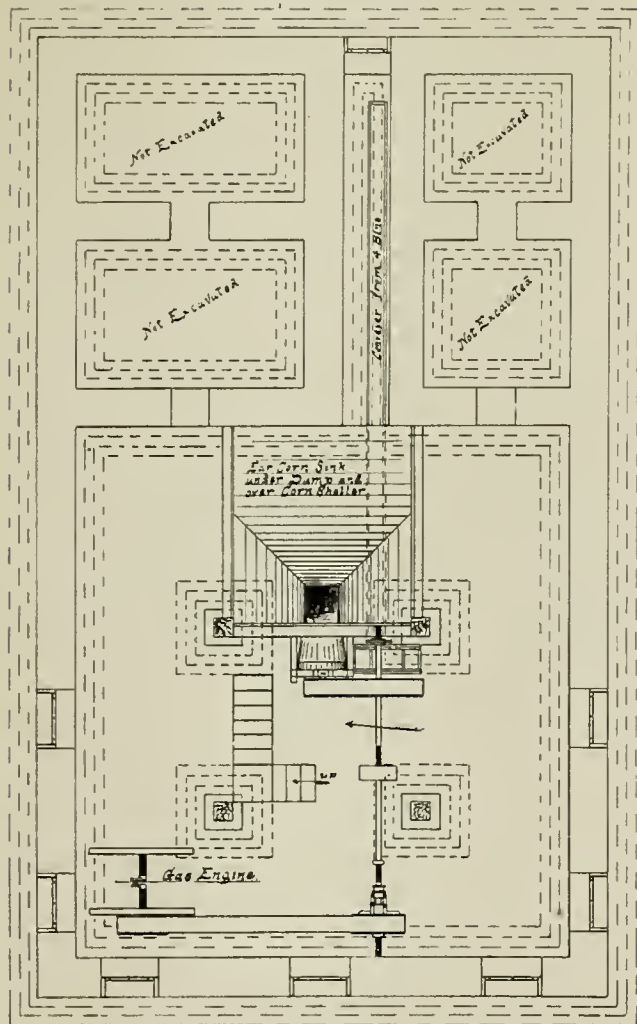
Let me say right here, said Secretary Smiley of Kansas, writing to Secretary Tyler of Illinois, that if we could rid the different exchanges of the country of the mercenary, conniving commission man, one's troubles would be few compared with what they are to-day. He greets you with a bland smile and swears that he stands ready to protect the interests of the regular grain dealers, and perhaps before the echoes of your footsteps have passed into space he is dictating a letter to some irregular dealer—perhaps at your very station—advising him that "car No. 7576 has arrived and same has been sold for $\frac{1}{2}$ cent above the market" and that the proceeds, less the amount of his draft, is placed to his credit, ending with the request that he will remember him when making further shipments to that market. 1

solicitation of business. You ask how we would stop it. Whenever any dealer finds that a scalper is doing business at a terminal market, let him advise the Association's secretary and have him write their commission men advising them of the facts in the case, intimating to them that if this occurs again, he may advise the regular trade, and unless their reply is satisfactory, notify every regular dealer by making copies of the correspondence and mailing it to other dealers in the state. Don't stop there, but notify the secretaries of other state organizations with the request that they lay it before the regular trade in their territory; and, mark what I say, you will have these fellows on their knees imploring you to have mercy. We have tried this plan and are satisfied with results. This is a question that we must meet squarely, and the sooner we do it the better for all concerned. If a commission man cannot secure a sufficient amount of business from the regular dealers to justify his remaining in the business, the sooner he gets out of it and off the face of the earth the better.

ILLINOIS GRAIN DEALERS.

A meeting of the local branch of the Illinois Grain Dealers' Association was held February 15 at Peoria, for the purpose of adjusting local differences and considering the question of grain rates and grain inspection. The meeting was called by B. F. Walker of Decatur, and among those present were: V. P. Turner, Pekin; E. F. Unland, Pekin; J. E. Miller, Lincoln; Charles Wiemer, F. J. Rapp, C. E. Froebe, Robert Jacobs, G. F. Smith, San Jose; J. S. McDonald, Green Valley; John Wiemer, Klon-dike; T. A. Bryant.

Many complaints have arisen as to discriminating railway rates in favor of Chicago, and the consensus of opinion at this meeting was that this unfavorable state of affairs could be remedied only by securing representation on the railroad and warehouse commission, and there compel the railroads to make a flat rate out of Peoria and other central Illinois shipping points as low as the Chicago rate. The remedy proposed for the alleged bad inspec-



VERTICAL SECTIONS OF PLANS FOR A 25,000-BUSHEL CORN ELEVATOR.

will ask, Is there a shipper in the state of Illinois that will knowingly do business with any concern that solicits and handles the business of the irregular dealer? I think not. Dealers will readily agree with me that by so doing they are assisting and even encouraging this class of commission merchants to invade your territory with price currents and flattering market quotations, and it will be only a matter of time until your farmer friends will flaunt them in your faces and boldly tell you that they can and will ship their own grain, and will not permit you to longer "rob them." Until your farmer friends commenced to receive these misleading quotations, he never questioned your integrity and delivered his product to you, being satisfied that he was receiving full market value. We cannot blame our farmer friends, if after receiving fancy quotations for their product they commence an investigation as to what our handling profits are. Do not make the mistake that many dealers have made of thinking that the American farmer is a fool. I believe that the American farmer is the crowning work of God's creation.

Now, I contend that we can effectually put a stop to terminal dealers soliciting the business of other than regular dealers. We contend that the handling of consignments by terminal dealers is in itself a

Now, there is a duty we owe the commission houses that stand ready to protect our interests. We should see that they have no cause to regret that they have thrown overboard this irregular business. The secretary should see to it that they receive a full share of business. Apply the golden rule, "Do unto others as you would have others do unto you."

OKLAHOMA GRAIN DEALERS
MEET.

The grain dealers of Oklahoma and Indian Territory met in annual convention at Oklahoma City, February 24. A number of new members have been added during the past year, and the reports of the officers show a generally prosperous condition of the Association.

A resolution was adopted, indorsing the present territorial grain law, which provides for local inspectors of grain instead of at terminal points, as formerly.

The following officers were elected for the ensuing year: President, Henry Larsen of El Reno; vice-president, F. D. Stevens of Purcell; secretary and treasurer, Colonel C. T. Prouty of KIngfisher; executive committee, W. R. Binkley, F. D. Stevens and E. L. Donohoe.

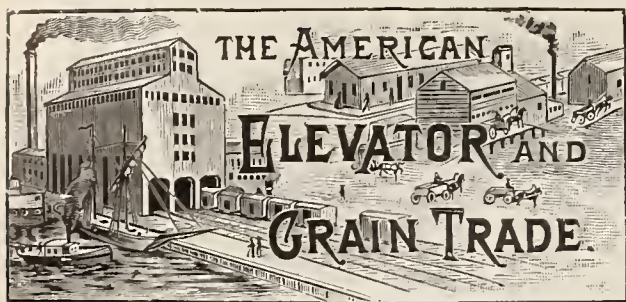
AGAINST THE ELEVATOR LAW.

The Illinois State Farmers' Institute, in session at Mt. Vernon, Ill., on February 22, adopted the following resolution, relative to the existing Illinois warehouse law:

Whereas, In 1896 the Legislature passed a bill known as the warehouse or elevator bill, providing that owners of public warehouses for the storage of grain be permitted to buy and sell same; and

Whereas, The law tends to create a monopoly in the buying and selling of grain, by giving the public warehouse men an undue advantage, thus destroying competition; therefore, be it

Resolved, That the State Farmers' Institute, in annual convention assembled, demand the repeal of this law at the next session of the General Assembly, as being injurious to the best interests of the farmer; and we ask the legislative committee of this Institute to urge its repeal.



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ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., MARCH 15, 1900.

Official Paper of the Illinois Grain Dealers' Association.

UNFAIR COMPETITION.

There is plenty of it. Several striking instances have been brought to our notice the past month. They are all alike in the one general feature that the "other fellow" wants all the business and proposes to get it, because he imagines that he has a longer purse or can put up a bigger bluff than his competitor. It is the adoption of wrecking methods in the grain trade. The man with the porcine proclivities proposes to inaugurate a campaign that can only end in the ruin of the weaker and erect his business on the grave of the vanquished.

In some of these cases, no doubt, a third party could successfully act as an intermediary. It is easy, where one of the parties is a newcomer into the field, for misunderstandings as to each other's intentions to arise, and when each is once assured that the other fellow has neither horns nor a cloven foot, an implied agreement to be sensible follows as a matter of course. In all cases it is worth trying to discover whether there is not some misunderstanding, having its origin in an attempt of a farmer to get half a cent more by telling what the competitor is doing. Some bitter grain wars have originated in this way, where all parties really intended to be fair, but gave too ready credence to ex parte evidence.

But occasionally an investigation will reveal the man who wants all the business and intends the other fellow shall have none. When the porcine characteristics are well defined and indubitable, wisdom shuts her lips, for advice is generally impossible. The man with a hog for a competitor must be an opportunist, and watch

for his chance to scald the hair off the rind. That is the only thing to do, and the opportunity usually comes. And when it comes, souse him into the hot water. The golden rule applies to people, not to pigs.

ELEVATORS ON RAILROAD RIGHT OF WAY.

The case reviewed by Mr. Rosenberger, on another page in this issue, will interest the army of elevator men who have houses erected on railway land, held under lease. Hitherto it has been taken for granted that these leases, which uniformly provide that the railway company shall not be responsible for loss by fire occasioned by its own negligence or that of its employees, are against public policy in making such a covenant. Insurance companies have proceeded on that assumption, and where cases have been tested the state supreme courts have generally held to the doctrine that the railways could not exact such a condition in a lease.

In the case referred to the Supreme Court of the United States holds a contrary view. In the lease at issue in that case the principal consideration named was the exemption of liability for damage by fire caused by the negligence of the railroad and its servants. The court says that such a consideration is perfectly valid; that the railway company cannot be compelled, even by statute, to permit private parties to occupy its right of way against the company's will. Knowing the location to be extra-hazardous, the company has a right to stipulate exemption from liability caused by locomotive sparks as part of the consideration of a lease.

It is to be noted that the court expressly disclaims the construing of this principle to cover its liability as a common carrier. Such a stipulation in a bill of lading or contract would be an entirely different affair. Neither does the decision affect the liability of the railway for damage by fire caused by locomotive sparks to property not located on railway ground under lease.

Insurance companies, in cases where loss has been occasioned by sparks from locomotives, have paid the loss, subrogated under the policy and collected from the railway. What they will do, in the light of this decision, in cases where the property is on leased railway land, with an exemption clause, is not hard to guess.

THE SUBSIDY BILL AND THE LAKE SHIPPERS.

It is a trifle premature to rejoice over the amendment to the ship subsidy bill, which gives the boats sailing from lake ports to foreign points the same subsidy as that given to vessels clearing from harbors on the seaboard. Theoretically, the amendment is an act of justice, but, practically, it will have little effect for some years to come. A deep waterway is still a matter of the future, and until it is an existing fact there will be little direct foreign trade out of the lake ports to Europe.

As the bill originally stood it meant high rates to the railroads on their export grain business to the seaboard; at least a better margin for "cutting" than they enjoy now. With the subsidy extended to the lake ports, the bill means that there will be a margin in boats carrying grain to the coast in competition with the

railroads. But this will only be on foreign trade. The coastwise trade and the traffic with Canadian points do not share in the subsidy. When it is possible for ocean-going vessels to leave Duluth or Chicago and cross the Atlantic the subsidy plan will be of some value to the lake region and the territory tributary to it, but as matters now stand the provisions of the amendment will not be available.

CONVENTION OF COMMISSION MEN.

The meeting in this city of representatives of the principal exchanges, called by President Warren of the Chicago Board of Trade, was not only productive of results in taking action on subjects of common interest, but will pave the way for future united action. The pathway of the commission merchant has not been strewn with roses of late years, either in Chicago or elsewhere, and the same general causes have been operative in all markets. Long-time sales, cut commissions and the bucket shop have all contributed to the depression. United action is necessary to remove the causes, so far as they can be removed by simple agreement.

The bucket shop, of course, presents a different problem. It will take an aggressive campaign to wipe out this pest, and probably nothing short of federal legislation will accomplish that result. To obtain this all the exchanges must interest themselves, for so far as the average legislator is concerned, it will have to be a campaign of education. A good beginning has been made in getting the trade together. It should be followed up with a definite program against bucket-shopping within the exchanges as well as outside of them.

THE S. S. TANNER CAMPAIGN.

The campaign of S. S. Tanner of Minier, Ill., in McLean and Peoria counties, against the present public elevator law of Illinois, is at least drawing attention to the subject. In the course of the debate Mr. Tanner's allegation that the railroads discriminate in their charges in favor of individuals operating their terminal elevators, being denied by a "railroad man" in the Bloomington Pantagraph and characterized as "balderdash," Mr. Tanner replies that his assertion is proved by two facts: (1) By the palpable one that the terminal elevator man is in possession of the railroad elevators, and (2) because "I have conclusive evidence in my possession showing wherein an elevator proprietor's acknowledged agent had a rebate of freight [making a] rate lower than any other shipper or the published rate of tariff on said road."

If it were worth while Mr. Tanner might create a buzz by producing this evidence before the proper tribunal, but as the Interstate Commerce Commission has at present only advisory and not mandatory power over the railroads Mr. Tanner's evidence, however pertinent in proof of his contention of favoritism, has rather a rarely curious than a practical value, for he seems to be the only man who has been able to secure "conclusive evidence" of this character who is willing to "produce it if necessary."

Mr. Tanner takes a rather pessimistic view of the future of the country grain shipper. He

believes that if these discriminations shall continue there will soon be but one grain buyer at a station, and he will be the agent of a terminal elevator. There is a suspicion of prophecy here, of course, but if the prophecy should realize it will be because the grain men and farmers alike quit the fight for both a true "public" elevator and for the destruction of railroad favoritism. Both of these reforms are within reach, and may be obtained by giving proper and timely attention to the coming legislative and congressional elections.

MORE NEW RATES.

The usual monthly revision of grain rates was put into effect on March 5. To vary the fiction, rates were not "restored," but were reduced; that is to say, the rates, somewhat as in actual use for weeks before, were formally published as the reduced rates! It was remarkable that as many as twenty-four hours elapsed after the rates went into effect before the non-favorites discovered that the Chicago favorites were getting the usual 2-cent cut on grain eastward. When reproached with perfidy, the traffic men replied with the stereotyped answer of "Contracts under the old rate!" which may or may not be a convenient fiction.

This sort of thing is getting to be awfully stale, and would hardly be worth referring to but for the recent correspondence of the "small shippers" of Chicago with J. Pierpont Morgan on the subject. Mr. Morgan, replying, said, truly, that, "The precise facts are not within my personal knowledge." The small shippers hardly expected that they were. The general fact, however, could hardly have escaped him, so that his answer is not so much a confession and avoidance as it is a sheer begging of the question. The small shippers expected, not that he would make the rates, but that Mr. Morgan had the power, as a railway financier, and probably the disposition, as a holder of railway stocks and bonds, to intervene on behalf of stable rates with the men he meets—the men in actual control of the roads and their traffic. And that this was a position entirely consistent with the railway organization is quite happily expressed by the Railway and Engineering Review of March 10, where it is said:

Only recently some high official of the railways is quoted as saying that because of the manipulations of traffic men it is found impossible to maintain the agreements which they have made; all of which, to use a slang but expressive phrase, is "pure rot." Broadly speaking, there is not a traffic man in the country who would cut a rate if he knew that it would meet with the disapproval of his superior officer. It frequently happens that such traffic men are notified that tariff rates must be maintained, but at the same time they are given to understand that their earnings must also be maintained; and experience has taught them that the man who disobeys the first injunction and secures the earnings stands a good deal higher than he who follows instructions and shows a decrease in revenue in consequence.

The futility of expecting any reform in rate-making and maintenance at the hands of the railroads themselves could hardly be more strongly stated by the friends of reform. And it never was so certain as now that reform can come only through the amendment of the Interstate Commerce Law in the interest of the shipper. If Congress will but protect his interest

it cannot avoid, by the same act, protecting that of the roads also; the two interests are inseparable.

REGULAR OHIO GRAIN DEALERS.

The secretary of the Ohio Grain Dealers' Association is making a second effort to secure a list of the regular grain dealers of that state, and to our Ohio readers we earnestly commend his appeal to the trade in that behalf, published in the department of "Communicated." Scoop-shoveling can never be eradicated from a given territory without the coöperation of the receivers and track buyers, and as the regular trade is always better than the shovel trade, few if any first-class receivers will in these days encourage business with the irregulars when the regular trade is prepared to assist them in locating the irregulars.

The Ohio Association attempted a year ago to make up such a list, but, being financially unable to employ a traveling man for the purpose, it was compelled to rely upon the members of the trade themselves. It is a remarkable fact that the secretary's appeal for the names of regular dealers last year was absolutely without result. This is the more remarkable because in Ohio the trade has never been without "troubles of its own." These are renewed with increased annoyance this season, for the state is overrun with shovelmen. The receivers have agreed to do business only with regular dealers if the latter will supply their names. If, therefore, every reader will make it his personal business to see that his county's regular dealers' names are at once sent to Secretary McCord a list can be made up in short order, and the trade will be immensely benefited.

GRUMBLING AT INSPECTION.

The inspection, like the poor, we have "always with us." And what to do with it is about as much of a puzzle as what to do with the poor. Up in Minnesota, a year ago, the complaints brought about an entirely new deal—the house was cleaned from top to bottom; and the reply, "We have changed all that," was deemed sufficient to all complaints from the Northwest. It was—for a time; but now there are as many growls as usual, and the Minnesota department is even charged with being responsible for the dirty stuff that has lately been going abroad and causing such bitter complaints in England of the unreliability of American inspection of export wheat, which certainly is approaching the scandalous in some export markets. Mr. Reishus easily cleared himself from this particular charge, but, being somewhat of a politician himself, "the other fellow" is after him just the same.

In his inaugural address, President Warren of the Chicago Board of Trade quite sharply criticised the state inspection system at Chicago, also, which shippers and receivers complain is grading everything in below contract and passing out everything offered. At this immediate present, the question, "Is corn inspection grown too rigid?" is one that is often put. In two days recently there were inspected 1,507 cars of corn, and only two cars in the lot graded contract. And this is but an exaggerated statement of the season's run. There is plenty of No. 2 on out-inspection, however, and

the question is raised, "Should the inspection be so rigid that it makes the country shippers' corn go No. 3 when, seemingly, only the natural handling of the grain through the elevators, or perhaps a slight additional drying, fits it for contract grade on the out-inspection?" It is not forgotten that the price of No. 3 corn is about the same in the Chicago market as No. 2 in the western markets, but this does not change the fact that a little less rigidity in the rules would let more contract corn into the Chicago market and give the dealer better prices for his shipments.

However, as the inspection department is at present the "whole thing," so to speak, the trade is "up against it" and can only hope and pray that "if it can't be easy it'll be as easy as it can."

THE FARMERS' VIEW OF IT.

The prodigality of the elevator man who gives away his storage room is none the less certain because it happens to be a semi-invisible waste, than would be that of the grocer who should give away sugar to all comers in order to be allowed to buy butter at market rates to sell again at an infinitesimal profit per pound.

Storage room in an elevator is worth money, and if there is an elevator man who doesn't appreciate the fact, let him learn of the farmer himself. An Ohio correspondent of the Country Gentleman, of recent date, speaking of the growing disposition of farmers to use the elevators for storage, says:

"A grain elevator in the hands of a responsible company provides more satisfactory storage for a crop of wheat than the usual farm granary. The delivery from the farm to the railroad is made while roads are good; there is no rehandling of the grain by the farmer when a sale is made; the wheat is upon the market without delay when the owner wishes to sell; and the total cost of holding the crop for a certain number of months is known definitely. A receipt is given for a certain number of bushels when the grain is delivered to the elevator, and that number of bushels is delivered in turn by the company when the holder sells, the shrinkage being covered by the elevator charge for storage. This charge varies. . . . When we take into account the labor of emptying into a farm granary and refilling bags at selling time, the loss by shrinkage and, too often, by vermin, and the disadvantage in having wheat stored somewhat remote from market, the carrying charge of the elevators seems preferable. There is an additional charge of insurance, but this should be incurred whether the grain is stored at home or elsewhere."

The service the elevator man performs is thus a definite one. It can be as accurately measured in dollars and cents as the value of the grain itself. Such a service should be paid for. It will be paid for whenever the elevator man insists upon its being paid for. And, besides, nowadays when the courts are treating the selling or disposing of stored grain as technical larceny, even when the farmer knows his grain will be paid for on demand, at market price day of demand, no elevator man can afford to take the risk of handling stuff on storage except for pay, and then he must handle it as stored grain only—the actual stuff to be delivered on demand or paid for before it is shipped out.

Who tied up the Cullom bill? Oom Paul, perhaps, or General Cronje, or the cat—anybody but a senator.

EDITORIAL MENTION

The way corn is inspecting nowadays makes it not unpleasant for the driers.

"The shortest way to a shipper's heart is through his account sales." But, of course, a track-seller can't expect to have his heart tickled in that way.

The annual meeting of the Nebraska Grain Dealers' Association will be called in a few days. It will probably be held at Omaha, on a day between the 10th and 20th of April.

The Illinois Grain Dealers' Association is out gunning for shortages and unjust inspections. Members are asked to report their recent or daily experiences along these lines to the secretary.

The fourth annual meeting of the Grain Dealers' Union of Southwestern Iowa and Northwestern Missouri will be held at the Hotel Grand, at Council Bluffs, Ia., on Thursday, March 22.

The New York Sun asks: "Of what advantage is it to the people of this state to build, at their own expense, a waterway for the cheaper transportation of western grain?" The Sun used to be able to see between the rails of a worm fence, but Dana fils would seem to need a monocle.

The struggle for change of the "contract" grade of oats is still going on in Chicago. If the fact that because the oats arriving do not grade No. 2 were alone urged as support of a change of grade, the same fact might be urged for a change of grade of corn, a less proportion of which grades contract on arrival than of the oats.

Among our visitors the past month was Mr. Geo. J. S. Broomhall of the Corn Trade News of Liverpool, without doubt the best statistical grain paper in the world. Mr. Broomhall is the foreign statistical correspondent of the Chicago Board of Trade, and his services in that capacity have been eminently satisfactory to the Board.

On the basis of representations made by Secretary Bewsher of the Nebraska Association, the Internal Revenue Department has ruled that the ordinary grain contract does not need a revenue stamp. It appears that some grain dealers using contracts are needlessly, though laudably, patriotic, and are making contributions to the government in this way.

They have political scandals abroad pretty much the same as we have in this country, only the acts of officials are better screened from public gaze and consequent comment. In Budapest the other day a Representative was charged with having sold several thousand bushels of oats to the government at a high price—"boodling," as we would call it. The press took up the matter and now a duel is im-

minent between the alleged boodling Representative and an ex-Minister.

Full reports of the proceedings of the meetings of the Kansas Grain Dealers' Association, held at Topeka, on March 14-15, and of the Iowa Cereal Club state meeting, at Des Moines, March 14, will appear in our next issue.

The announcement comes from Washington that the Industrial Commission will send another sub-committee to Chicago, primarily to investigate the labor question and, incidentally, the sugar, biscuit and cereal trusts. If this sub-committee investigates no harder than its colleagues got after the public elevator men last fall, there will be no special necessity for anyone to dodge.

Some of the grain dealers of Central Illinois have notified their farmers that they will dock corn that has been wintered imperfectly protected from one to five cents, according to its condition. Why can't this sensible stand be made general? It requires some backbone, but one season of firmness would bring the farmers to their senses and next fall would see every last mother's son of them building proper cribs.

The late David A. Wells, somewhere in his writings on economics, has said that the utilization of former wastage by the packing houses has added no less than a dollar to the value of every head of cattle now slaughtered. No doubt some similar dividend to the corn grower will be realized from the utilization of the offals manufacture by glucose and starch works, although it may at present be difficult to estimate the amount.

The Boer war may or may not be popular in England, but there is at least one class of Britishers who are profoundly disappointed with it, in view of the way wheat has been behaving. They thought the price would be sure to advance. Instead, the war has not done the English farmer a penny's good. If war always had this effect on prices it would soon become unpopular enough to make a peace congress worth while.

The "steel barge line" scheme, of which St. Louis has talked for several years, has again been revived by Alex MacDougall, designer of the "whaleback" type of deep-water vessels. Although the canals have been getting rather a black eye of late, the free highway of the Mississippi to New Orleans ought to be able to float grain to the sea in competition with rail. But in the case of St. Louis, just now it seems to be a case of "first get the grain."

The New York elevator men object to the proposed bill to fix the maximum rate in New York at one-half cent for handling grain from store to ship. This rate is three-eighth cent less than the present rate, and, being less than the charge made by elevators at other points for the same service, may be unfair. Some good people who cannot understand how the "good name" of "No. 1 Northern," etc., is filched from the grain somewhere between Duluth and Liverpool or London, may be interested in knowing that one reason for the New York men's objection to the handling rate named above is

that the New York "floating elevators have to mix wheat as it goes through them on board ship," etc., and the allowance is not great enough.

The American Malting Company, under its original management, disappointed both its friends and its enemies; its friends because the deceptive, creamy spume that floated on the "face of the waters" disappeared so soon, and its enemies that it lasted so long. It isn't pleasant recovering from a "katzenjammer," but the company had to try it. The new management now announces that dividends will be paid when they are earned. This plan may benefit the company, but the shareholders won't have nearly so much fun as of old.

The railways and some of the large corporations that are supposed to be recipients of railway favors are bending their endeavors to kill the amendments to the Interstate Commerce Law in the committee and prevent a vote thereon in the Senate. The shippers as a class have been heard from, and there will be music in the air when the statesmen get back home and ask for renominations and reelections if they decline to take up a matter of such vital interest to the well-being of the country.

The magnitude of the bucket shop almost passes belief. It is said that one firm in Kansas City in one day sold 13,000,000 bushels of wheat and in another 11,000,000 bushels. Besides transactions like these, the business of the legitimate exchanges, which make the prices, are comparatively insignificant. The magnitude of the evil might commend it to Congress for a remedy if that body could be induced to forget its political "play for position" long enough to attend to its masters' business.

Sons often inherit the father's wealth, but those who voluntarily assume the father's debts are not numerous enough to crowd each other on this mundane sphere. Years ago E. D. Chapin, a prominent member of the Chicago Board of Trade, met with reverses and failed, leaving about \$40,000 due to creditors after exhausting all his resources. His son, Simeon B. Chapin, who was a boy eight or nine years of age at the time of the failure, has liquidated these old claims, all of which were outlawed years ago. The elder Chapin died years ago and the son has worked his way up until he felt able to square the claims which most of the creditors had forgotten.

The corn millers of the West met in Chicago the past week and resolved upon a decisive course of action to secure relief from discriminating differential freight rates. The corn millers declare that under the present differential rates corn can be shipped to foreign points for milling cheaper than the manufactured product of the western mills. The corn millers say that their export trade has fallen off one-half in consequence of this discrimination, and, as it is affected by means of rail and water rates, the matter is beyond the provisions of the Interstate Commerce Act. Accordingly, it was decided that the most feasible plan was to secure injunctions in district courts and to appeal to Congress to revise the Interstate Commerce

Act so as to make it an effectual bar to discrimination in rates as practiced at present.

Of the corn exported last year, 208,000,000 bushels in all, New York took 40,000,000 bushels, Baltimore 46,000,000 bushels and New Orleans 22,000,000 bushels. While New York has been gradually losing to Philadelphia, Boston and Baltimore, until the latter now holds first rank, New Orleans has been growing until her export of corn is now fourth on the list. The idea that New Orleans could not build up an export trade in cereals on account of climatic influences seems to have broken down in the presence of fact.

The newspapers continue to record the suffocating of children in elevator grain bins. Indeed, almost every month the casualty column of this paper contains the dreadful details of such an accident. It is perhaps too much to expect that they will ever cease, although their prevention is, generally speaking, the easiest matter in the world. Children can be kept out of grain elevators, and no maudlin feeling of letting them "have a good time" should blind the adult eye to dangers of which the little ones themselves have no conception.

The Illinois pure food law, act of April 24, 1899, goes into effect on July 1 next. The pure food commission rule that the act of 1877, entitled, "an Act to prevent frauds in the coloring of grain," is still in force. This act provided that it shall be unlawful to subject "any barley, wheat or other grain to fumigation by sulphur or other material, or to any chemical or coloring process, whereby the color, quality or germ of such grain is affected," or to offer the same for sale, under penalty of fine of \$100 to \$1,000 and imprisonment not exceeding three months in the county jail.

The Canadian Agricultural Department will repeat this year the former distributions of test seeds, but not on the ridiculous plan in vogue on this side the line. The distribution is confined to oats, spring wheat, barley, field peas, corn and potatoes. The seed is carefully selected and cleaned, and one 3-pound package of one sort only is sent to each person who makes personal application therefor. The object of the Canadian distribution is to improve the character and quality of the products, not to furnish a petty bribe or personal perquisite, which self-respecting congressmen should be above bothering with.

The Grindeland law of Minnesota, regulating commission men in operation, is like most laws directed against particular abuses—the cupidity of the men it was designed to benefit leads in spite of the law to their undoing. The bogus commission men, who were and are always men handling produce, do not now call themselves commission but produce dealers, and by offering farmers a few cents in advance of the commission market quotations they have no difficulty in getting consignments to make away with as easily as they did as commission men. "Roguary crushed to earth by special enactment," says the St. Paul Globe, "will rise again in another place as vigorous as ever." There is no better prevention for dis-

honesty in business than honesty and common sense. The man who relies on promises that on their face bear the markings of roguary somewhere in the deal should not complain if his fingers get scorched.

One "historical" grain operator has discovered that "from the February decline there has for twenty years been an 'invariable advance' in March and April." Another suggested that (with three exceptions) there has also been an "invariable advance" from the low price of one month to the high price of the following month of the same twenty years. The only thing about it not discoverable—and this is what one wants to know when he trades—is the "low price" of the one month and the high price of the following month. This discovery is always made too late, so that the information isn't worth playing or coppering.

It is quite the fad with certain agricultural papers to decry the exportation of corn. "The farmer who understands what loss he sustains when a bushel of corn goes from his farm will not further any scheme looking to the larger exportation of that cereal." The idea is that he should "send it abroad in the form of beef and pork." But is this practicable? He can hardly expect to ship all his corn as meat without unduly lowering the price of the meat, and, therefore, of the corn also. It would seem to be a wiser policy to cultivate the market for both corn and meat and give the farmer the benefit of the competition that naturally would be created.

An Indiana man, writing to the Farmer, says it is an "outrage" for grain buyers to buy corn on the basis of so much money for 70 pounds, when the state law says 68 pounds is a bushel. The Indiana farmer "does not understand his contention." For the law of 1897 makes 70 pounds of ear corn a bushel until the 1st of December, in each year, and after that date 68 pounds, and any buyer exacting more is liable a fine of from \$1 to \$25 for each offense. But buying by the pound is not buying by the bushel, and it does no hardship to anyone except him who expects to get the price of 70 pounds of corn when he delivers only 68 pounds.

The president of the New York Central made a proposition recently, which to some was a surprise, in the matter of transportation rates. Speaking of the proposition to spend \$60,000,000 on the canals of New York, he said that if the state would pay him a fair rate of interest on the proposed sum and add the cost of running the canals, he would carry free of charge all the grain from Buffalo to New York that might be offered for transportation. At 4 per cent interest, and a half million for maintenance, the total amount would be \$2,900,000. This would mean the transportation of 100,000,000 bushels, in round numbers, at 3 cents per bushel. The total receipts at New York from all sources were about 140,000,000 bushels, and, as Mr. Callaway admits, a rate of 2¼ cents from Buffalo to New York, the Central could almost afford to carry the whole amount of New York's receipts for the sum named. Mr. Callaway's offer says nothing about loading at Buffalo and lightering at New York.

Perhaps a reduction of the offer to writing would have decreased its value as a bluff.

The interesting and quite important point has been presented to a West Superior court, apparently for the first time, Is the mail the agent of the consignor or of the consignee? A sawmill had been insured, but prior to the burning of the mill the policy was ordered canceled by the insuring company, and the mill-owners forwarded the policy by mail. While the policy was still in the hands of the mail service the mill was burned, and the owners sued to collect the insurance. The plaintiffs claim that they are entitled to the insurance, because the mails were their agent, and the policy was not delivered into the hands of the insurance agents. The insurance company, on the contrary, claims that the postoffice was its agent, and that the policy was delivered to it when dropped into the post by the insured.

The weakness of the Interstate Commerce Commission is not alone in its inability to enforce its rulings, but in the inordinate length of time it sometimes takes to get a ruling. An aggravating example of delay comes from the Northwest. Six years ago complaint was made by Wisconsin men that the grain rates from common points favored Minneapolis, although natural conditions and distance were in favor of Milwaukee. After many hearings and a wait of three years, a decree was rendered in favor of Milwaukee; that is, that the rates to the two cities should be equalized. But as the Commission may propose, while the railroads dispose, the latter met this decree by abating the difference in rates one-half. This, of course, was as unsatisfactory as it was futile. Fresh complaints were entered, and three years more passed in their consideration, with the result that the matter remains precisely the same as it existed six years ago. It is no wonder that the public has practically lost all interest in the doings of the Commission, save a curious one in the problem how long it will be before the railroads, operating on an irresponsible basis, shall have destroyed all other men's business save that of their peculiar favorites.

Theoretically, we have no tyrants in America, but occasionally some judge gives a pretty fair representation of Dionysius, all things considered. A Chicago gentleman who owns an elevator has a son who is an attorney. Not long ago the man in charge of the machinery of the elevator was summoned on the jury, and the lawyer appeared to explain that if the man served on the jury the machinery must stop. Everybody knows that the theory of most judges is that a juror is of no possible account unless he is serving the public at great inconvenience and loss to himself. If the juror's business will collapse utterly if he is taken from it, and he has three or four children down with diphtheria, he makes an ideal juror. Consequently, the Chicago judge promptly told the lawyer that as it appeared the man's service on the jury would lead to loss and inconvenience, he could not possibly be spared and sent the young lawyer away with a legal flea in his ear. Then the flea whispered to him to write to the judge and resent the harsh action of the court. He did so, and the judge promptly haled him

before the court and fined him \$100 for writing the letter. If some judges could levy fines commensurate with the contempt which their conduct deserves, the minimum amount would be about a million dollars.

The New York Legislature would seem to have decided to ignore legislation on behalf of the Erie Canal enlargement. The governor's request for \$62,000,000 was perhaps too much for the non-canal counties. Although the 14-foot channel to Montreal is not yet open, in spite of announcements to that effect last fall, it soon will be, when New York may realize the strength of the new short line. It is 520 miles from Buffalo to New York, with 300 miles of canal; the distance from Port Colborne to Montreal is 370 miles, with 70 miles of canal, all the remaining distance being free waterway. The trip to New York and return takes 18 days, but only 7 days to Montreal and return. Erie Canal barges can carry 8,000 bushels of grain; Welland Canal barges can carry 50,000 bushels. They can go to Montreal and return nearly three times while Erie boats are making a single round trip. Under these conditions the Erie Canal, in its present condition, cannot hope to continue to carry grain after this year. It will then be a trial of strength between the railways from Buffalo and the canal of Canada.

Without presuming to question the correctness in point of law of Judge Tuley's decision in the Christie-Street Commission Company case, enjoining the Chicago Board of Trade from discontinuing its market quotation reports, it is not improper to say that law and good morals do not seem always interchangeable terms, from surface appearances at least. Nothing would so quickly put a quietus to the bucket shop as the discontinuance of the ticker service, with its endless detail of quotations. Let these be withdrawn for one day and the entire fabric of this insidious and well-nigh ubiquitous gambling device would disappear like a puff of smoke. The ticker is its very breath of life. The decision, then, seems to give legal status to the worst feature of the situation, in that the injunction was granted on the petition of a company that is popularly believed to be a bucket-shopping business, and it thus introduces a new and very powerful element in support of pure gambling with grain counters as distinguished from legitimate trading, which can at all times proceed without the special protection of the law and the courts.

While the new rule fixing larger minimum carloads, recently put in force by the railways, is in line with the tendencies of railway economies, as expressed in mogul engines, heavier rails and stronger bridges, and, therefore, is hardly likely to be rescinded—that being in the nature of a step backward—it is apparent from the letters on the subject, printed in the "Communicated" department this month, that in all respects the rule was not thoroughly digested by the railway authorities before its promulgation. As will be seen, the rule requires in some instances physical impossibilities, as in loading oats, and in other respects works hardships to individuals. It would seem that these inequities of the case might be remedied if they were brought to the attention of the traffic managers in the proper spirit by the organiza-

tions of grain men throughout the country. On the other hand, the rule has its advantages for the regular grain dealer, who has his elevator and proper facilities for handling grain as opposed to the scoop-shovel man, who contemplates the big carload with anything but equanimity. This being the fact, to say nothing of the big carload's other advantages, it might be well to think twice before complaining too loudly against it.

Trade Notes

The Illinois Gas Engine & Machinery Co. of Chicago has been incorporated with a capital stock of \$2,500.

The Pneumatic Elevator & Weighing Co. of Indianapolis, Ind., has issued \$75,000 worth of preferred stock.

Flora & McMillin, grain elevator builders and manufacturers of grain cleaning machinery at Indianapolis, Ind., are building a new factory, in which to turn out their machines in larger quantities.

The National Association of Gas and Gasoline Engine Manufacturers held a short business meeting at Chicago on February 15, and elected officers for the ensuing year. The next meeting will be held September 13, in Pittsburg.

J. R. Martin of Allenville, Ill., has purchased the interest of Mr. Bean in the firm of Bean & Cole, Sullivan, Ill., manufacturers of the Ideal Automatic Car Loader. The business will be conducted hereafter under the name of the Ideal Car Loader Co., Sullivan, Ill.

The Jeffrey Mfg. Co., Columbus, Ohio, are sending out a large new catalog of their coal washing equipments and other coal mining, elevating, conveying and handling machinery. Anyone interested in this class of machinery should not fail to ask them for a copy.

D. A. Robinson, the general contractor and elevator builder of Minneapolis, is making plans for a number of coal bunkers for the White Pass & Yukon Railroad in Alaska. S. F. Evans, an expert mechanical engineer in the employ of Mr. Robinson, is in Alaska looking after this work. The larger bunker will be located on the dock at Skagway and will cost perhaps \$25,000.

The Link-Belt Machinery Company of Chicago, in its latest catalogue, "Modern Methods of Handling General Merchandise," gives some very interesting views of their inclined freight carriers, endless tierce, barrel and sack carriers, inclined freight conveyors, horizontal conveyors, light package elevators, continuous freight elevator with automatic discharge, and the Link-Belt Telescoping Ashes Elevator. The catalogue is full size, with large, handsome half-tones, in which all details of the machinery shown are clearly seen.

The large Hess Pneumatic Grain Dryer at the Iowa Elevator, Chicago, has been completed and will be started to work at once. This dryer is of the latest model and contains some novel improvements not used before. The Hess Company, in erecting this dryer, as in all their other dryers at Chicago, has complied with all the suggestions of the fire underwriters, and the dryer is permitted without extra charge. This is the second dryer erected by the Hess Company for the Chicago Railway Terminal Elevator Company, the operation of the first one having exceeded all expectations.

The Invincible Grain Cleaner Company of Silver Creek, N. Y., has received the contract of the Pillsbury-Washburn Flour Mills Co., Ltd., of Minneapolis, Minn., for the complete equipment of cleaning and packing machinery for their new 1,500-bushel cereal mill which is now in process of construction. Another large firm in the Northwest also, the Washburn-Crosby Company, have expressed their preference for the Invincible machines by the placing of an order for five largest

size Invincible Sconers. The popularity of the Invincible machines is keeping the works very busy, running full force and full time to keep even with orders.

The Steel Storage & Elevator Construction Company of Buffalo, N. Y., among recent contracts, has arranged with the Collin County Mill & Elevator Company of McKinney, Texas, for additional storage of 180,000 bushels, divided into two large tanks, 40x55 feet, and three smaller tanks, 30x40 feet. The tanks will be built in connection with the company's new mill at that point.

R. J. Moulton, superintendent for the Barnett & Record Company, and S. F. Evans, superintendent for D. A. Robinson, two of the best known elevator builders of the Northwest, have commenced the manufacture of the Evans Patent Wagon Dump, at Minneapolis, Minn. They have now 50 dumps completed and will manufacture as many more for the coming season. The increase in orders has necessitated the enlarging of their plant.

The Price Current of Machinery and Supplies of March 1, issued by Webster Mfg. Co., Chicago, is said to be the most complete catalogue of grain elevator machinery and supplies ever published. It also contains much good information for the country grain dealer, and will prove a valuable adjunct to the office. Copies will be sent upon application. We have also received from the Webster Mfg. Co. a book of sprocket chain appliances, profusely illustrated and tastefully bound and printed.

The Albert Dickinson Company, Chicago, has registered with the Patent Office a trademark, No. 34,294, for grass, clover and field seeds and seed grains, the essential feature of which is the word "Crescent" and a crescent-shaped symbol inclosing the letter "D." They have used this since October 1, 1897. They have also registered another trademark (No. 34,295) for the same purpose, the essential feature of which is the word "Sun" and the sun-shaped symbol inclosing the letter "D." This they have also used since October 1, 1897.

The sack elevator recently patented by Eugene Brown of Colfax, Wash., according to the Gazette of that place, is going to prove a great boon for the warehousemen in the coast states, where all grain is handled in sacks. The sacks are carried on an inclined plane, which can be raised or lowered to carry them to any desired height. It is operated by a one-horse power gasoline engine. The whole outfit rests on casters and can be rapidly moved about the warehouse. We understand that he is arranging to put them on the market.

"The Hanging of the Crane" is the title of a fine booklet of some 30 pages and cover, in which Messrs. H. W. Caldwell & Son Co. announce their removal to Western Avenue, Seventeenth to Eighteenth Streets, Chicago, and illustrate and describe their new plant. The crane in this case is a three-motor electric one, with a span of 48 feet and capable of lifting 20 tons. Mr. H. W. Caldwell takes justifiable pride in this splendid modern plant, necessitated by an ever-increasing business, the foundation of which he laid more than a quarter of a century ago in a very modest way. Mr. Caldwell has been a steady advertiser right from the start, and he believes this has had much to do with the success of the business. It is the policy of the company to make their advertising straightforward and distinctive, and to use only the best space in the best papers. The "American Elevator and Grain Trade" has always been included in their list.

On February 27 the E. H. Pease Mfg. Co. of Racine, Wis., manufacturers and jobbers of mill and elevator machinery and supplies, made an assignment to C. H. Adams for the benefit of its creditors. Mr. Adams, who was secretary and treasurer of the company, and is now assignee, explains the situation as follows: "The company is perfectly solvent and will more than pay out in full if it is decided to wind up the business. The act is simply in the line of a business proposition to strengthen its financial condition and permit it to go forward, with ample capital in proportion to

its large increase of business for the past year, or else retire its debts in full and withdraw from trade. Its principal stockholders and officers have other and much larger business interests, and its managing officers have much better positions open to them than to continue their present position here unless it is thought best to strengthen the company to meet the increase of business in hand and in sight. There are no small creditors, the management having paid in cash all accounts under, say, \$250, that it received up to noon of the date of its assignment, whether said accounts were due or not, and consequently, outside of its own stockholders, has not more than seven or eight other creditors to deal with all told. Assignee's inventory is now being taken and will be completed this week, and a joint meeting of the stockholders and creditors has been called to take place in the near future, and it will then be determined what action will be taken."

SOUTHERN GRAIN ASSOCIATION.

The annual meeting of the Southern Grain Association was held in the Merchants' Exchange at St. Louis, March 3. The meeting was largely attended by members from all the leading markets from which grain is shipped to the Southern and Southeastern States, including delegates from Atchison and Leavenworth, Kan.; Chicago, Cairo, Peoria and Sheldon, Ill.; Cincinnati, Evansville, New Albany and Shelbyville, Ind.; Louisville and Henderson, Ky.; Memphis and Nashville, Tenn., and Kansas City and St. Louis.

The meeting was harmonious and enthusiastic, and the consensus of opinion was that the conditions of doing business in the Association's territory had been very much improved during the past year. A number of new members were enrolled from Western States. The reports of the officers showed that the Association is in excellent condition.

John F. Kuhn of Evansville, Ind., who has been president of the Association during its first year, declined to stand for reelection, and S. Zorn of Louisville was unanimously elected president for the ensuing year. Alfred Brandeis of Louisville was re-elected secretary and treasurer. The following were chosen vice-presidents: W. B. Harrison, St. Louis; Lee Early, Cincinnati, Ohio; W. H. Small, Evansville, Ind.; C. M. Bullitt, Henderson, Ky.; O. D. Smith, Nashville, Tenn.; H. L. Halliday, Cairo, Ill.; W. Denton, Leavenworth, Kan.; S. R. Washer, Atchison, Kan.; H. H. Maury, Memphis, Tenn.; J. S. McDonald, New Albany, Ind.; A. G. Tying, Peoria, Ill., and F. N. Hartwell, Louisville, Ky.

It was decided to hold the next annual meeting at Louisville, Ky., on March 2, 1901.

RECEIVERS AND SCALPERS.

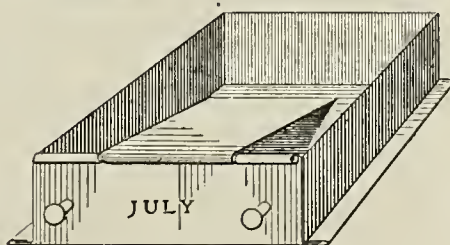
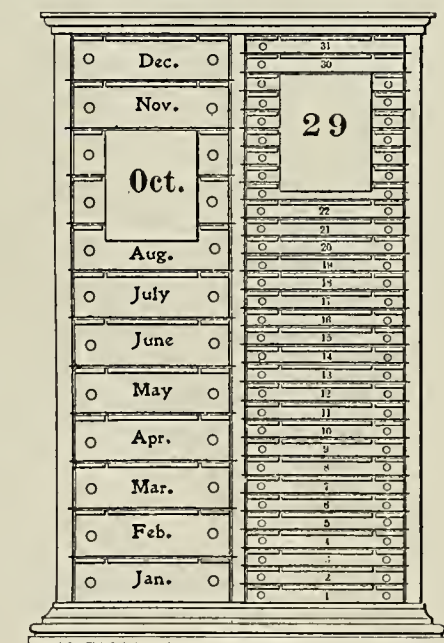
The hardest thing to control, or what we have found so, is consignments from irregular dealers, said Secretary Stibbens, of the Grain Dealers' Union, in a recent address. A great many commission firms seem to think they have a moral right to receive consignments from anyone who wishes to ship a car of grain, and will insist that while they are not bidding the scalper, they are compelled to receive his consignment. If anyone can prescribe a permanent remedy for this evil we would be glad to know what it is. We have been reasonably successful in handling this kind of trouble, but it has given us a great deal of grief. About the only thing we can do in such cases is to advise our members that certain firms are handling the scalpers' business, and they in turn will withhold all business from that class of houses. If commission merchants in the different markets think for a moment they can handle the scalpers' business without injuring their own, they will wake up some morning to find they are badly mistaken. I am not drawing on my imagination when I say to the receiving houses that country dealers will absolutely refuse to patronize the commission firms which handle the scalpers' consignments. It has taken a long time to educate the local dealers up to this point, but past experi-

ence has taught them a lesson; and nothing but fair treatment on the part of the receivers will hereafter gain for them the patronage of the country dealers. We are glad to know that we only have a very few receiving houses who persist in wanting to handle the scalpers' consignments, and their existence as receivers will be of short duration if they continue to pursue a course detrimental to the general trade. Commission merchants cannot afford to antagonize the trade from whom they get their business, neither can we understand why they should desire to do so, but, if they do, the chances they will take will be very hazardous.

A CONVENIENT CALENDAR AND PROMPTER.

A correspondent of the American Machinist tells that paper of a handy appliance which he saw in use in a large establishment in Germany, and gives a cut of it. It struck him, as it will the reader on first glance, that it was overdoing the calendar business; as altogether more elaborate than ordinary necessities called for. But on examination he concluded that the idea was decidedly clever and a really admirable arrangement.

Reference to the illustration shows it to consist of a wooden case, containing two vertical rows of boxes. To the left are twelve boxes, each labeled in small characters with the name of the month. To the right are thirty-one similar, but shallower, boxes, one for each day of the month. The tin bottoms of the boxes are extended on each side to form tongues to slide in saw-cut grooves in the case. A drop leaf is hinged to the upper edge of each box front, and on the under side of this leaf the name of the month or day of the month is painted in very bold characters. Memoranda are



CALENDAR AND PROMPTER.

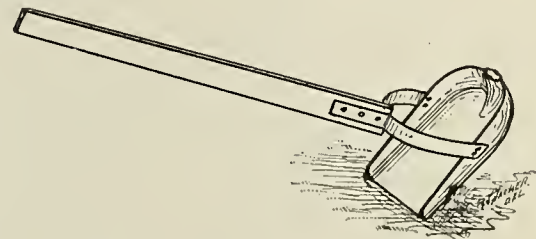
distributed to the various monthly boxes. On the first of the month its box is pulled out, the loose drop which has served to weigh down the notes is dropped to the front, to expose the name prominently, and the drawer returned to place after the notes have been removed for detail distribution in the day drawers. Each day the proper day drawer is pulled out to have its drop let down to serve in its capacity as a calendar, and the notes contained in it are removed for action.

A cargo of 12,000 bushels of seed corn was shipped from Philadelphia this month to be used in Egypt.

The state of Minnesota has collected all the money for seed loaned to farmers in the past ten years, except about 10 per cent of the total of \$216,918.

A HANDY APPLIANCE.

A correspondent of the "American Miller" gives a sketch of a home-made appliance that is a handy article around a mill or elevator for use on grain, feed, etc., in open bins. The principal part, an old scoop, from which the handle has been broken out,



is an easy thing to find around any elevator. By means of two iron bands this is attached to a piece of poplar from 4 to 6 feet long, $\frac{7}{8} \times 2\frac{3}{4}$ inches at one end and tapering to 2 inches at the other end. An appliance of this kind is particularly useful in bins which are inaccessible from more than one side.

A GRAIN TRADE TALK.

We have received the first number of "Grain Trade Talks" from the author, Edward G. Heeman, manager of the receiving department of Ware & Leland, Chicago. "Grain Trade Talks" purports to be issued in the interest of the country grain dealers and the grain trade in general. The first number consists of a booklet of 15 pages, and the topic considered is the "consignee" and the "track buyer." This subject is handled in a masterly manner, and those who want to get some clearer ideas on this question should read this little book. The country grain dealer, like every one in business, wants to buy and sell his merchandise in such a manner as shall leave him the largest profits after his transactions are ended. Of the two methods now in vogue for disposing of his grain, either "selling on track" or "consigning," must of necessity be superior to the other. "Grain Trade Talks No. 1" is upon this question, and this and future talks are designed to assist in remedying the prime evils that during the past few years have developed in the grain trade and are detrimental alike to the farmer, the grain dealer, and the commission merchant. Copies will be sent on application, free of cost, by the publishers, Ware & Leland, Chicago.

Utah shipped 115 carloads of alfalfa seed last year, worth $7\frac{1}{4}$ cents a pound, or \$334,000.

The National Grange has endorsed the proposed amendments to the Interstate Commerce law, and urges farmers to petition their representatives to pass the bill.

R. S. Hook and A. C. Weir of Monmouth, Iowa, have opened an office in Burlington, Iowa, for grain and commission business, under the firm name of Hook & Weir.

C. H. Sells, Rankin, Ill.: The "American Elevator and Grain Trade" is getting to be one of the best papers in the country for the practical man, and I read it with great interest.

Morton & Co. succeed Messmore, Morton & Co., grain commission, St. Louis, the name of the firm having been changed March 1. T. B. Morton, J. O. Allen and C. A. Morton are the members of the firm.

The port of New Orleans now claims the prestige of having shipped the largest cargo of flour ever taken out of the United States. This shipment consisted of 70,500 bags, equal to 4,406 tons, of western flour. It was shipped on the Meridian, consigned to London. The previous record was 53,000 sacks.

During the last year 25,202,901 bushels of grain and 2,198,513 gallons of molasses were used for the manufacture of liquor in this country, which produced 107,618,127 gallons of spirits and 1,657,808 gallons of rum, making a total of 109,275,928. This is about one gallon and a half to each man, woman and child in the country, to say nothing of the individual allowance of beer and wine.

IN THE COURTS

In the case of the Toledo Grain and Milling Co. against Louis M. Friedman before Judge Kinkade at Toledo, the court decided that the use of "Pansy" sacks by Mr. Friedman was simply lawful competition and not to be restrained.

According to a recent decision of the North Dakota Supreme Court, grain in elevators in that state on April 1 is taxable, and the tax is chargeable against the elevator. The elevator owner has a lien on the grain to the amount of the tax, which he can thus compel the owner to pay.

William T. Kemper, of the Kemper Grain Co., of Kansas City, brought suit against the Louisville & Nashville Railroad Company for \$2,000. He claims that the railroad company kept a shipment of corn which he had bought from the R. T. Morrison Grain Co. for a claim which the railroad had against the Morrison company. Mr. Kemper holds the bills of lading for the grain and insists that its value be paid to him.

John C. King & Co., of the Chicago Board of Trade, obtained a verdict for \$2,956, February 16, on a claim for \$3,162, against Hugh Crabbe, for margins lost in the great Leiter wheat deal of 1898. An effort was made to join Joseph Leiter as co-defendant, but this was not allowed by the court. Mr. Crabbe was an employe of Levi Z. Leiter and it was claimed that Joseph Leiter verbally guaranteed his account.

According to a recent decision by Judge Lacombe, of the United States Circuit Court, at New York, "calls" are not taxable. The matter came up in the suit of S. V. White against the collector of internal revenue, to recover money paid for war revenue stamps. If the decision holds it will require the government to pay back to brokers and speculators all the money which they have been required to pay for the purchase of stamps used to affix to "call" papers.

Martin Leddy has brought action as administrator against Iddings & Arnold of Bradford, Ohio, for \$10,000 damages, for the life of Simon, son of Martin Leddy, who was smothered in a grain bin in the defendants' elevator last May. It is claimed by the plaintiff that the boy was sent up stairs into the bin by an employe. The defendants claim that the boy, with some companions, was playing near the bin and fell in and was killed as the result of his own carelessness.

Leroy S. Churchill and Milton Churchill, partners under the firm name of Churchill & Co., of Toledo, O., have brought suit for injunction against Edward Baldwin, of Weston, O., to restrain Baldwin from again engaging in the grain business in Weston. Churchill & Co. allege that on August 26, 1898, they bought from Baldwin his real estate and grain business in Weston, and that he agreed not to engage in the grain business in Weston for five years thereafter, but that he now threatens to do so unless enjoined by the court.

The Northern Pacific Railway Co. has brought a test case before the federal courts to decide the constitutionality of the revenue tax on bills of lading for export. The road shipped 50,000 pounds of wheat to Liverpool and claimed exemption on constitutional grounds, quoting the clause of Article 1, Section 9, which says that "no tax or duty shall be laid on articles exported from any state." The Federal Court at Minneapolis on jury trial, March 7, found against the railway company, but the case will be taken to the United States Supreme Court.

F. A. Laidley, of Cincinnati, brought suit against Finley Barrell & Co. for \$1,750, profits which he claims would have accrued to him had the firm named not sold out his wheat deal of February 2, 1897, before a train bearing additional margins could reach Chicago. Mr. Laidley's margin of \$1,000 was exhausted on Saturday and his wheat was sold out at the closing price on that day, while a draft for additional margins was on the way, the train being late. Mr. Laidley's claim was for the amount he would have made had the wheat been held and sold at the highest subsequent price. His actual

loss was \$1,095. Verdict was rendered in his favor for \$250.

Peter Galligan, of Lindsay, Neb., recently secured a verdict against Thomas Baker of Omaha, for \$223, representing the difference in value of a shipment of wheat at Omaha and Memphis. Baker bought several cars of wheat from Galligan for shipment to Memphis. At that point it was rated lower than at Omaha and sold for a sum \$223 less. Baker gave Galligan credit for the amount of the sale, refusing to pay any more. The jury found that Galligan was entitled to the sum the grain would have sold for before shipment.

A recent case in the Superior Court at Baltimore, Md., in which the Baltimore Elevator Co. was defendant, involving the collection of taxes by the city amounting, with interest, to about \$9,000, was decided in favor of the elevator company. The tax sought to be collected was on the shares of stock owned by the shareholders of the company, which, under the statutes, was to be collected and paid by the company. The court found for the defendant on the ground that the failure of the assessor to assess the value of the shares to the individual stockholders, as required by law, was fatal to a recovery.

CHICAGO BOARD OF TRADE DOINGS.

A petition has been circulated asking that the fee for transferring a membership be increased from \$25 to \$100.

The board of directors have increased the salary of Attorney Robbins from \$4,000 to \$5,000 a year.

The directors recently adopted, on behalf of the Board of Trade, a resolution asking Congress to pass the Cullom amendment to the Interstate Commerce law.

A large number of new memberships have been sold during the past month, and many transfers made. The net prices to seller have ranged from \$2,000 down to \$1,700, and \$1,600 as the minimum.

A temporary injunction, restraining the Board of Trade from cutting off its market reports from other than members and regular correspondents, was granted by Judge Tuley at Chicago, on February 23, on the petition of the Christie-Street Commission Co. of Kansas City. Officers of the Board deny that there is any disposition to restrict the dissemination of its quotations or to oust the Western Union Telegraph Co., as alleged. Their only desire in this connection is to deprive bucket-shop keepers of quotations, and the law sanctions them in doing this.

In connection with the proposed amendment to abolish trading in distant futures, President Warren and some of the directors are negotiating with the elevator interests of Chicago to make a change in the system of carrying charges. It is desired that one-fortieth of a cent be assessed against the grain daily, instead of one-quarter of a cent at the beginning of each 10-day period. This change, it is thought, would encourage trading in cash grain in the speculative pit.

THE PROPOSED AMENDMENTS TO NEW RULES.

On February 28 the directors held a meeting and approved the proposed amendments recommended by the committee on revision of rules. These were ordered posted, preparatory to a ballot vote of the association on March 12. The revised rules provide that the initiation fee of \$2,500 shall be required of each new member, and out of the fund thus accumulated memberships, free of incumbrances, may be retired for \$1,500. After \$150,000 has been accumulated, the retiring price would be increased to \$2,000. The new provisions make a minimum charge of $\frac{1}{8}$ cent per bushel on grain in lots of 1,000 and 5,000 bushels or multiples thereof, $\frac{1}{4}$ cent per bushel on flaxseed in the same quantities. Where property is bought or sold for account of members of the association, or for firms, one of whose general partners is a member, or for corporations, one of whose executive officers is a member, one-half the above rates shall be the minimum charged. Higher rates may be charged by agreement.

For the purchase or sale of property for imme-

diately or future delivery, the following minimum rates of brokerage are to be charged: On wheat, corn and oats $12\frac{1}{2}$ cents per 1,000 bushels; on rye, flaxseed and barley, 25 cents per 1,000 bushels. Higher rates may be charged by special agreement, providing they do not exceed double the above rates.

For purchasing or selling hay or straw in carloads containing ten tons or less, \$5 per carload. On cars containing more than 10 tons, 50 cents per ton shall be the minimum.

The following rates of commission shall be the minimum charges for receiving, selling and accounting for property, as follows: For selling carload lots of wheat in store, f. o. b., cars or vessels, on track, delivered or to be shipped from any other point, $\frac{1}{2}$ cent per bushel. On carload lots of rye and barley, 1 cent per bushel. On carload lots of corn in store, or corn otherwise than in store, $\frac{1}{2}$ cent per bushel. Carload lots of oats, $\frac{1}{2}$ cent per bushel. For selling canal-boat loads of grain in store, afloat or f. o. b. vessels, $\frac{1}{2}$ cent per bushel. Selling flaxseed in bulk or in bags, 1 per cent. Cloverseed in carload lots, 1 per cent; less than carload lots, $1\frac{1}{2}$ per cent. Timothy and all other seeds, in bulk, $1\frac{1}{2}$ per cent. Broomcorn, $\frac{1}{4}$ cent per pound.

For the purchase and sale of the following articles to arrive, whether the contract for purchase or sale be first made, the following shall be the minimum rates of commission: Flaxseed in car lots, 1 per cent; in 5,000-bushel lots, $\frac{1}{2}$ of 1 per cent. Clover seed in car lots, 1 per cent. All other seeds, $1\frac{1}{2}$ per cent.

For purchase and shipment by vessels, rye and barley, $\frac{1}{4}$ cent per bushel; other grain, $\frac{1}{8}$ cent per bushel.

For purchase and shipment of wheat by rail, in less than 5,000-bushel lots, $\frac{1}{2}$ cent per bushel; 5,000-bushel lots or more, $\frac{1}{4}$ cent per bushel.

For the purchase and shipment of corn and oats by rail, $\frac{1}{4}$ cent per bushel; rye and barley, $\frac{1}{2}$ cent per bushel.

The proposed rule governing trading in futures of grain, limiting the time, says: Section 3. All trades or contract for future delivery of grain shall provide for delivery thereof within a period of time not exceeding beyond the last day of the second month next following that in which the trade or contract is made; provided, that contracts for corn and oats made on and after the first day of October in each year may provide for delivery in the month of May next following the date of such trade or contract. No trade or contract which shall provide for or contemplate delivery of grain at a time beyond the period of time herein provided shall be settled through the clearing-house or settlement-rooms of this association. This section shall go into effect on the first day of May, 1900.

On March 12, by a vote of 655 to 385, the Board voted in favor of adopting all the rules above outlined, except that referring to the membership. The new commission rates will be rigidly enforced; and a reward of \$2,500 will be paid to anyone furnishing information that shall convict a member of violating the rule.

The membership rule was lost by a vote of 466 to 577. Since the commission rule is adopted, the private wire houses will want their correspondents to become members of the Board. On this account a lively demand for seats is expected until this demand is supplied.

IT WILL BE CONTINUED.

The Board of Trade Hay and Grain Dealers' Association of Chicago held its quarterly meeting and banquet at the Sherman House on the evening of February 27. About fifty wholesale dealers were present. W. M. Herely, the newly elected president, occupied the chair. The future of the Association was discussed quite fully, and while some contended that it had accomplished the objects for which it was brought into being and should now be discontinued, yet it was decided to continue it as formerly. J. W. Fernell was the principal speaker of the evening and reviewed at length the history of the Association and its development since organized.

RANGE OF PRICES AT CHICAGO.

The daily range of prices for cash grain at Chicago for the month ending March 12 has been as follows:

February.	NO. 2* R.W. WHT.		NO. 1 NO. 2* SP. WHT.		NO. 2* CORN.		NO. 2 OATS.		NO. 2 RYE.		NO. 1 N.W. FLAXSEED	
	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.
12.	70 1/2	71	66 1/2	67	33 1/4	33 1/4	23 1/4	23 1/4	55 1/2	55 1/2	160	160
13.	70 1/2	71	66 1/2	67	33 1/4	33 1/4	23 1/4	23 1/4	55 1/2	55 1/2	160	160
14.	69 1/2	70 1/2	66 1/2	67	33 1/4	33 1/4	23 1/4	23 1/4	55 1/2	55 1/2	160	160
15.	71	71 1/2	66 1/2	67	33 1/4	33 1/4	23 1/4	23 1/4	55 1/2	55 1/2	160	160
16.	70 1/2	71 1/2	66 1/2	67	33 1/4	33 1/4	23 1/4	23 1/4	55 1/2	55 1/2	160	160
17.	70 1/2	71 1/2	66 1/2	67	33 1/4	33 1/4	23 1/4	23 1/4	55 1/2	55 1/2	160	160
18.	70 1/2	71	66 1/2	67	33 1/4	33 1/4	23 1/4	23 1/4	55 1/2	55 1/2	160	160
19.	70 1/2	71	66 1/2	67	33 1/4	33 1/4	23 1/4	23 1/4	55 1/2	55 1/2	160	160
20.	70 1/2	71	66 1/2	67	33 1/4	33 1/4	23 1/4	23 1/4	55 1/2	55 1/2	160	160
21.	70 1/2	71	66 1/2	67	33 1/4	33 1/4	23 1/4	23 1/4	55 1/2	55 1/2	160	160
22.	70 1/2	71	66 1/2	67	33 1/4	33 1/4	23 1/4	23 1/4	55 1/2	55 1/2	160	160
23.	70 1/2	71	66 1/2	67	33 1/4	33 1/4	23 1/4	23 1/4	55 1/2	55 1/2	160	160
24.	70 1/2	71	66 1/2	67	33 1/4	33 1/4	23 1/4	23 1/4	55 1/2	55 1/2	160	160
25.	70 1/2	71	66 1/2	67	33 1/4	33 1/4	23 1/4	23 1/4	55 1/2	55 1/2	160	160
26.	70 1/2	71	66 1/2	67	33 1/4	33 1/4	23 1/4	23 1/4	55 1/2	55 1/2	160	160
27.	70 1/2	71	66 1/2	67	33 1/4	33 1/4	23 1/4	23 1/4	55 1/2	55 1/2	160	160
28.	70 1/2	71	66 1/2	67	33 1/4	33 1/4	23 1/4	23 1/4	55 1/2	55 1/2	160	160
29.	70 1/2	71	66 1/2	67	33 1/4	33 1/4	23 1/4	23 1/4	55 1/2	55 1/2	160	160
30.	70 1/2	71	66 1/2	67	33 1/4	33 1/4	23 1/4	23 1/4	55 1/2	55 1/2	160	160
31.	70 1/2	71	66 1/2	67	33 1/4	33 1/4	23 1/4	23 1/4	55 1/2	55 1/2	160	160
Mar.—	66 1/2	67 1/2	64	65	33 1/4	33 1/4	23	23	55	55	160	160
1.	66 1/2	67 1/2	64	65	33 1/4	33 1/4	23	23	55	55	160	160
2.	66 1/2	67 1/2	64	65	33 1/4	33 1/4	23	23	55	55	160	160
3.	66 1/2	67 1/2	64	65	33 1/4	33 1/4	23	23	55	55	160	160
4.	66 1/2	67 1/2	64	65	33 1/4	33 1/4	23	23	55	55	160	160
5.	66 1/2	67 1/2	64	65	33 1/4	33 1/4	23	23	55	55	160	160
6.	66 1/2	67 1/2	64	65	33 1/4	33 1/4	23	23	55	55	160	160
7.	66 1/2	67 1/2	64	65	33 1/4	33 1/4	23	23	55	55	160	160
8.	66 1/2	67 1/2	64	65	33 1/4	33 1/4	23	23	55	55	160	160
9.	66 1/2	67 1/2	64	65	33 1/4	33 1/4	23	23	55	55	160	160
10.	66 1/2	67 1/2	64	65	33 1/4	33 1/4	23	23	55	55	160	160
11.	66 1/2	67 1/2	64	65	33 1/4	33 1/4	23	23	55	55	160	160
12.	66 1/2	67 1/2	64	65	33 1/4	33 1/4	23	23	55	55	160	160

* Nominal price. † Holiday.

During the week ending February 16, Prime Contract Timothy Seed sold at \$2.50@2.52 1/2 per cental; Prime Contract Clover Seed at \$8.35@8.40; Hungarian at \$0.70@0.80; German Millet at \$0.90@1.35; buckwheat at \$1.10@1.15 per 100 pounds.

During the week ending February 23, Prime Contract Timothy Seed sold at \$2.40@2.52 1/2 per cental; Prime Contract Clover Seed at \$8.35@8.40; Hungarian at \$0.70@0.85; German Millet at \$0.90@1.50; buckwheat at \$1.10@1.15 per 100 pounds.

During the week ending March 2, Prime Contract Timothy Seed sold at \$2.45 per cental; Prime Contract Clover Seed at \$8.25@8.40; Hungarian at \$0.75@0.85; German Millet at \$0.90@1.50; buckwheat at \$0.90@1.15 per 100 pounds.

During the week ending March 9, Prime Contract Timothy Seed sold at \$2.45 per cental; Prime Contract Clover Seed at \$8.30; Hungarian at \$0.70@0.80; German Millet at \$0.90@1.20; buckwheat at \$0.90@1.00 per 100 pounds.

FLAXSEED AT CHICAGO.

The receipts and shipments of flaxseed at Chicago during the 20 months ending with February as reported by S. H. Stevens, flaxseed inspector of the Board of Trade, were as follows:

Months.	Receipts.		Shipments.	
	'99-1906.	1898-99.	'99-1900.	1898-99.
August.....	624,375	666,420	670,392	978,790
September.....	1,231,875	1,212,780	775,135	729,808
October.....	1,162,814	1,140,280	348,149	872,650
November.....	1,068,698	769,210	555,308	309,824
December.....	512,875	423,980	494,339	281,720
January.....	174,000	313,200	231,423	231,619
February.....	259,500	180,960	110,605	107,220
March.....	313,780	313,780	380,768	380,768
April.....	271,440	271,440	185,020	185,020
May.....	272,020	272,020	139,633	139,633
June.....	121,220	121,220	57,205	57,205
July.....	175,625	175,625	194,129	194,129
Total bushels.....	5,335,137	5,860,915	3,187,351	4,463,334

WHEAT RECEIPTS AT PRIMARY MARKETS.

The wheat receipts at nine primary markets during the thirty-six weeks ending March 5, for the last three years, according to the Cincinnati Price Current, were as follows:

	1890-1900.	1893-99.	1897-98.
St. Louis.....	8,013,000	12,590,000	10,810,000
Toledo.....	10,659,000	11,094,000	9,347,000
Detroit.....	2,392,000	4,046,000	4,021,000
Kansas City.....	13,707,000	25,075,000	25,902,000
Cincinnati.....	603,000	603,000	632,000
Winter.....	34,771,000	53,408,000	50,512,000
Chicago.....	21,976,000	29,059,000	28,764,000
Minneapolis.....	8,302,000	10,420,000	7,644,000
Duluth.....	64,652,000	64,652,000	61,642,000
Spring.....	138,404,000	165,442,000	135,382,000
Total bus., 36 weeks.....	173,175,000	218,850,000	185,894,000

Fred Lienan, Mt. Carmel, Ill.: The "American Elevator and Grain Trade" is a welcome caller every month in the year and I would not do without it because of the many valuable hints it contains.

RECEIPTS AND SHIPMENTS.

Following are the receipts and shipments of grain, etc. at leading receiving and shipping points in the United States for the month of February, 1900:

BALTIMORE—Reported by Wm. F. Wheatley, secretary of the Chamber of Commerce:

Articles.	Receipts.		Shipments.	
	1900.	1899.	1900.	1899.
Wheat, bushels.....	335,317	353,940	511,995	732,261
Corn, bushels.....	3,568,076	3,568,666	3,624,196	4,138,037
Oats, bushels.....	184,223	94,930	82,802	100,020
Barley, bushels.....	5,020	5,020	5,020	5,020
Rye, bushels.....	19,572	185,685	215,532	215,532
Timothy Seed, lb.....	1,704	2,471	2,432	560
Clover Seed, lb.....	19,594	10,764	12,164	4,955
Hay, tons.....	4,234	2,638	2,120	523
Flour, bbls.....	262,272	198,165	239,069	263,424

BOSTON—Reported by Elwyn G. Preston, secretary of the Chamber of Commerce:

Articles.	Receipts.		Shipments.	
	1900.	1899.	1900.	1899.
Wheat, bushels.....	467,918	887,411	1,410,749	1,184,384
Corn, bushels.....	577,354	1,342,600	567,839	1,511,838
Oats, bushels.....	517,185	586,407	162,663	303,886
Barley, bushels.....	154,386	625	141,137	141,137
Rye, bushels.....	1,360	17,080	17,080	17,080
Hay, tons.....	11,090	17,150	1,120	2,176
Flour, barrels.....	61,766	69,725	6,157	8,189

CHICAGO—Reported by George F. Stone, secretary of the Board of Trade:

Articles.	Receipts.		Shipments.	
	1900.	1899.	1900.	1899.
Wheat, bushels.....	947,610	1,823,375	764,933	431,425
Corn, bushels.....	12,140,419	13,318,306	6,710,657	4,950,641
Oats, bushels.....	7,448,926	8,220,039	4,908,122	4,479,452
Barley, bushels.....	1,891,858	1,116,852	838,152	333,362
Rye, bushels.....	151,510	266,005	104,671	106,507
Timothy Seed, lb.....	5,151,150	4,634,268	5,900,864	4,261,013
Clover Seed, lb.....	1,086,775	950,226	1,959,394	1,990,549
Other Grass Seed, lb.....	1,220,769	1,292,890	1,880,741	572,433
Flaxseed, bushels.....	284,979	182,435	116,144	49,003
Broom Corn, lb.....	257,200	181,725	260,419	464,983
Hay, tons.....	14,341	15,563	556	1,145
Flour, barrels.....	1,269,630	379,333	927,575	304,388

CLEVELAND—Reported by F. A. Scott, secretary of the Chamber of Commerce:

Articles.	Receipts.		Shipments.	
	1900.	1899.	1900.	1899.
Wheat, bushels.....	154,260	113,217	51,190	138,810
Corn, bushels.....	1,243,313	659,722	536,954	245,408
Oats, bushels.....	519,386	449,057	288,172	147,707
Barley, bushels.....	10,200	7,099	819	97,048
Rye, bushels.....	538	2,410	2,410	2,410
Flaxseed, bushels.....	6,615	8,738	997	4,465
Hay, tons.....	54,800	32,950	18,920	23,740

CINCINNATI—Reported by C. B. Murray, superintendent of the Chamber of Commerce:

Articles.	Receipts.		Shipments.	
	1900.	1899.	1900.	1899.
Wheat, bushels.....	104,103	128,350	63,512	74,650
Corn, bushels.....	761,550	387,504	401,906	65,938
Oats, bushels.....	281,500	334,699	81,644	91,182
Barley, bushels.....	100,350	105,905	59	2,962
Rye, bushels.....	10,850	41,942	9,863	12,778
Timothy Seed, bags.....	4,180	755	4,337	3,316
Clover Seed, bags.....	6,469	4,628	7,185	4,814
Other Grass Seeds, bags.....	7,841	4,194	6,674	3,330
Hay, tons.....	6,437	8,610	3,714	6,483
Flour, barrels.....	148,071	145,600	119,744	114,235

DETROIT—Reported by F. W. Waring, secretary of the Board of Trade:

Articles.	Receipts.		Shipments.	
	1900.	1899.	1900.	1899.
Wheat, bushels.....	81,574	266,401	48,880	123,681
Corn, bushels.....	230,248	302,357	211,999	172,863
Oats, bushels.....	116,616	73,587	17,700	17,700
Barley, bushels.....	38,451	29,439	1,200	35,469
Rye, bushels.....	15,601	21,336	4,286	17,883
Hay, tons.....	10,800	12,150	7,800	12,500

DULUTH—Reported by S. A. Kemp, secretary of the Board of Trade:

Articles.	Receipts.		Shipments.	
	1900.	1899.	1900.	1899.
Wheat, bushels.....	3,222,975	2,673,147	154,108	111,700
Corn, bushels.....	337,371	1,721,916	1,000	5,071
Oats, bushels.....	4,213	804,800	22,590	20,457
Barley, bushels.....	27,435	67,201	29,146	31,361
Rye, bushels.....	19,639	85,011	.....	.....
Flaxseed, bushels.....	5,562	77,752	6,129	787
Flour, barrels.....	600	4,415	99,460	99,460
Flour production, bbls.....	.....	.....	.....	.....

ELEVATOR & GRAIN NEWS

EASTERN.

L. D. Baker will erect a hay and grain warehouse at Malden, Mass.

W. R. Brown has bought D. F. Connor's grain store at Holyoke, Mass.

Capt. Arthur Nickerson has opened a grain and hay store at West Dennis, Mass.

E. W. Reavey of Mystic, Conn., contemplates opening a wholesale grain business at that place.

W. A. Wheeler has succeeded Wheeler & Co. in the wholesale grain business at Bridgeport, Conn.

Samuel M. Sibley, a small feed dealer at Baltimore, Md., trading as S. M. Sibley & Co., made an assignment last month.

R. W. Waterman of North Chester, Vt., has sold his interest in the grain, flour and lumber firm of Waterman Bros. to his brother, Chas. H. Waterman, who took possession on March 1.

Robert Wilson and George C. Wolven have purchased the grain, feed and elevator business of Stephen Abbey's Sons at Kingston, N. Y. This business was started in 1852 by Stephen Abbey.

Baldwin & Co., grain dealers at Meriden, Conn., will erect at an early date a three-story brick building 50 feet square. It will be thoroughly equipped for economically handling grain and grinding feed.

The Chesapeake & Ohio's million-bushel elevator at Newport News, Va., is now well started, and it is expected that the building and surrounding improvements will be fully completed within the next three or four months.

The grain firm of Samuel Squire & Co. at Westfield, Mass., has been succeeded by the W. G. Davis Company. The company has good transportation facilities at its store, and does both a wholesale and retail business.

The Island Railway Co. last month conveyed to the Great Northern Elevator Co., for a consideration of \$594,000, a tract of land, docks, etc., at the foot of Ganson Street, Buffalo, N. Y. This property consists of water front land, with dockage on the City ship canal and the Buffalo River, and occupied by the Great Northern Elevator, the Northern Steamship Company's buildings and the tracks of various railroads. The company formerly occupied the land under a lease.

ILLINOIS.

Work is in progress on the new elevator at Pier-son Station, Ill.

Jefferson Colvin has sold out his grain business at Colvin Park, Ill.

The elevator at Normal, Ill., has just been thoroughly overhauled.

Ross Hockaday of Decatur, Ill., has let the contract for an elevator at Oreana, Ill.

It is reported that T. D. Hanson & Co. will erect a fine modern elevator at Fairland, Ill.

B. S. Tyler of Decatur, Ill., has purchased William Cole's dump and grain business at Camargo.

The starch factory at Kankakee, Ill., with a capacity of 6,000 bushels of corn daily, will soon be put in operation.

The Barnard & Leas Mfg. Co. have sold, through the Skillen & Richards Mfg. Co., Chicago, a No. 000 Victor Corn Sheller.

Elbert Boyer has moved from Morrison to Tampico, Ill., where he has rented a half interest in the West End Elevator.

Jacob Mathis has put in a scale at Deer Creek, Ill., and is buying grain. He contemplates building an elevator in the spring.

The Webster Mfg. Co., Chicago, were among the list of recent purchasers of Victor Corn Shellers from the Barnard & Leas Mfg. Co.

The Neola Elevator Co. of Chicago has purchased S. W. Robinson's elevator at Leaf River, Ill., and placed B. F. Miller in charge of same.

Rowe & Anderson have opened a store at Tuscola, Ill., and are handling all kinds of grain and feedstuffs and exchanging feed for corn.

Charles Guffin of Compton has purchased the elevators at Shaw and West Brooklyn, Ill., and will make his headquarters at the latter place.

The C. M. Seckner Engineering Co. of Chicago is making plans for a new elevator for the Calumet Grain & Elevator Co. of Chicago, Ill. It will be located at South Chicago and will have a capacity

of about 250,000 bushels, being designed for a clipping and cleaning house exclusively.

E. E. Bagley has moved the headquarters of his grain and feed business from Chicago back to Woodstock, Ill., where he has opened a nice suite of offices.

J. J. Thoele of Effingham, Ill., announces that after the dissolution of the firm of Weber & Thoele, he will continue in the grain, feed and live stock business.

O. P. Carroll's grain office at Putnam, Ill., was entered by a tramp one night recently and several articles of value taken. The tramp was arrested later at Henry.

The Farmers' Grain, Coal & Lumber Co. has been organized at Wapella, Ill., with a capital stock of \$2,500. The incorporators are J. C. Hull, William Hart and E. M. Thorp.

Charles Nobbe, who has been in the grain business at Farmersville, Ill., ever since the town started, has sold out to his sons, Harry and Charles H., and retired to his farm south of that town.

J. C. Collins has sold his elevator on the Big Four Railroad just west of Champaign, Ill., to the Cleveland Grain Co., taking as part pay an elevator at Tuscola. He will probably move to Tuscola soon, unless he disposes of the property.

John S. Metcalf & Co. are making plans and specifications for a new 500,000-bushel grain elevator for the Halliday Elevator Company at Cairo, Ill. The plant will include belt conveyor to the river. The owners are now driving the piles and putting in the foundation.

F. L. Churchill of Fairbury, Ill., informs us that as soon as the roads break up in the spring he will entirely remodel his elevator there. He will also put in a new elevator at Lodemia. This will be constructed after plans designed by Mr. Churchill, who says it will be different from anything he has seen or heard of. He thinks it will be very convenient.

CENTRAL.

An elevator will be built at Mulberry, Ind., this spring.

C. E. Stoll has leased his elevator at Boughtonville, Ohio.

Dreher & Myers took charge of the elevator at Ney, Ohio, on March 1.

James K. Niblick has opened a grain, seed and feed store at Decatur, Ind.

A. R. McMurtry & Co. have discontinued their grain business at Marshall, Ind.

G. Cook & Co. have opened a grain, seed and produce store at Holland, Mich.

Straus, Ackerman & Co. of Albion, Ind., have leased the B. & O. elevator at Avilla.

The National Mills, at Prospect, Ohio, are to build an addition in the shape of a warehouse and elevator.

Thomas Wharton is now proprietor of the grain business at Yale, Mich., succeeding Wharton & Holden.

M. O. Dewey has taken an interest in the grain and hay business of M. B. Dewey & Co. at Jackson, Mich.

J. H. Walsh of Grand Ledge, Mich., has purchased the grain business of J. M. Burtch & Co. at that place.

J. B. Hobbs has withdrawn from the copartnership known as the Mendon Elevator Company, at Mendon, Ohio.

Newman & Barnard will commence work on a new elevator at Greenfield, Ind., as soon as the weather permits.

It is reported that Johnson & Highman, grain dealers at Mt. Vernon, Ind., will build a large flour mill at once.

The Gilliland Grain Co., Van Wert, Ohio, has purchased a No. 2 Cornwall Corn Cleaner from the Barnard & Leas Mfg. Co.

Some Belding (Mich.) parties state that they will build an elevator at Riverdale, if the citizens will aid them in the enterprise.

O. Gandy & Co. have installed the Hall Distributor and other modern machinery in their elevator at South Whitley, Ind.

Ed. McLaughlin of Nevada, Ohio, has put in a 15-horsepower gasoline engine, and will add a mill for turning out chopped feed.

The administrator of the estate of James E. Miller is winding up the affairs of its grain and wool business at Worthington, Ind.

At the annual meeting of the stockholders of the New Baltimore Elevator Company of New Baltimore, Mich., William Baker was elected president;

A. F. Reinecke, vice-president, and C. E. Hills, secretary and treasurer.

Dull Bros., millers at Celina, Ohio, have purchased the Guy Elevator at that place.

George Thierwechter has succeeded A. D. Thierwechter in the grain business at Oak Harbor, Ohio.

The safe in Ford & Co.'s elevator office at Bellville, Ohio, was blown open by burglars recently but nothing of value was secured.

Jacob C. Smith has been appointed receiver for the Farmers' Milling & Shipping Co. of Osborn, Ohio. The assets are placed at \$20,000, with liabilities of \$32,000.

McLaughlin & Ward of Jackson expect to build an addition to their elevator at Leslie, Mich., in the spring. A portion of it will be utilized as a bean-picking room.

A. B. Cohee & Co. of Bringham, Ind., have purchased McCormick Bros' elevator at Burrows and Benjamin Maxwell's elevator at Woodhill. Samuel Jenkins now has charge of both these houses.

The Grenell Seed Co. has let a contract for a three-story building, 55x85 feet, at Saginaw, Mich. This is a branch establishment and will handle beans and peas grown by farmers under contract.

The Home Mill & Grain Co., Indianapolis, Ind., has been incorporated with a capital stock of \$39,000. The directors are John Keck, Charles T. Johnson, Louis H. Keck, Henry Schnur Jr., and Edward E. Highman.

IOWA.

Edmunds & Co. are building an elevator at Edna, Iowa.

F. J. Taylor has sold out his grain and coal business at Creston, Iowa.

J. W. Hood of Edgington, Minn., is now proprietor of the elevator at Bristow, Iowa.

E. H. Smith & Co.'s grain elevator at Salix, Iowa, was sold at sheriff's sale last month.

P. M. Ingold of Spencer, Iowa, will build an elevator at Langdon, Iowa, right away.

James McDonald has sold his elevator at Bayard, Iowa, and contemplates moving to Coon Rapids.

The new elevator at Mosley, Iowa, was completed last month. It is owned by the Winona Grain Co.

The Mahoney Elevator Co.'s house at Latimer, Iowa, which collapsed January 23, is being rebuilt.

Riggs Bros. are now conducting the grain business at Kent, Iowa, succeeding Riggs Bros. & McCafferty.

McCarty & Abraham have succeeded C. A. McCarty in the grain and implement business at Prescott, Iowa.

Oscar Casey has purchased H. P. Jensen's grain and stock business at Dysart, Iowa, and also the elevator at Dinsdale.

It is reported that the Northern Grain Co. of Chicago will build an elevator at Renwick, Iowa, as soon as spring opens.

Moore Bros. & Felthouse, who own a number of elevators along the Iowa Central, have begun work on an elevator at Algona, Iowa.

Allro & Isham of Estherville, Iowa, expect to move their elevator, in the spring, from the B. & C. R. & N. tracks to those of the M. & St. L.

The Northwestern Iowa Grain Co. of Mason City have added to their line of elevators the Laferton Elevator & Coal Co.'s business at Abbott, Iowa. They will add a lumber yard to the business.

George Whisler has withdrawn from the elevator firm of Whisler Bros. at Farragut, Iowa. Riley Whisler and his son, Jesse, now conduct the business.

J. W. Berry has moved from Blanchard to Clarinda, Iowa, where he has joined interests with his brother, A. A. Berry, in the wholesale seed business.

James Cook & Son of Blencoe, Iowa, have sold their elevator, 25,000 bushels of corn, and other property, to the Kinsella Grain Company of Colon, Neb.

Harry G. Northey has sold his grain elevator at Alexander, Iowa, to George Musselheiser of Hampton. Mr. Northey has engaged in the manufacturing business at Waterloo.

The Humtting Elevator Company are to move their head office from McGregor, Iowa, to Minneapolis, Minn. The company operates some 80 elevators in Iowa and South Dakota.

T. J. Ryan has leased for a term of three years his elevators, located at Floyd Crossing and Double day, Iowa, to C. C. Feil. These houses are connected by private telephone line. On account of ill health Mr. Ryan has also rented to George Carr

for three years his elevator and corn crib at Carrville, Iowa.

At the new station of Triumph, Iowa, the Interstate Elevator Co. are building an elevator. It will be equipped with a Hall Grain Distributor.

A. Grant has given up his grain and live stock business at Wall Lake, Iowa, and removed to Ashton, Ill., where he engages in the same line. C. M. Hopkins continues the business at Grant's old stand.

The Farmers' Cooperative Association, who operate an elevator, etc., at Rockwell, Iowa, recently held their annual meeting and declared a dividend of \$13 per share. They transacted \$500,000 worth of business last year.

SOUTHERN.

Moore & Lutz will build a grain elevator at Lenoir, N. C.

Tate Bros. will rebuild their cottonseed-oil mill at Hollywood, Miss.

C. W. Howard of Loraue, Ga., contemplates the erection of a cottonseed-oil mill.

Cassell Bros. will build a small grain elevator in connection with their mill at Gadsden, Ala.

J. A. Robey & Co., dealers in grain at Hillsboro, Texas, have sold out their grocery business.

H. K. Bryson is about to commence work on his new grain and cotton warehouse at Fayetteville, Tenn.

V. E. Goldman has transferred his grain and feed store business at Houston, Texas, to his father, A. Goldman.

The Little Rock Mill & Elevator Company, Little Rock, Ark., has changed its name to the Capital Elevator Company.

H. J. Bolton of Wharton, Texas, and others, have organized a company to build cottonseed-oil mills at three different points.

The Mt. Pleasant Milling Co., Mt. Pleasant, Tenn., are about to build a 50,000-bushel elevator in connection with their flouring mill.

The Gordonville Milling Company contemplates the erection of a 100,000-bushel elevator in connection with their plant at Gordonville, Tenn.

W. T. Donohoe of Perry has purchased the interest of C. T. Donohoe in the grain firm of Donohoe & Donohoe, grain dealers at Tonkawa, Okla.

The firm of Roszell & Jones, consisting of C. T. Roszell and D. B. Jones, has purchased the grain, feed and coal business of W. T. Jones at Lexington, Ky.

W. E. Gorton is about to erect a large roller mill at Stillwater, Okla., and is moving his old mill building there from Ingalls and will fit it up for a grain elevator.

The Aiken Industrial Company of Aiken, S. C., has been chartered, with a capital stock of \$50,000. The company will manufacture cottonseed oil, meal, flour, etc.

The Starkville Cotton Oil Company of Starkville, Miss., has been organized, with a capital stock of \$30,000, to build a cottonseed-oil mill and ice factory. W. C. Welborn is secretary.

The Marsden Company will put in at their cellulose plant at Owensboro, Ky., a large corn warehouse and feed mill. They expect to buy considerable corn on the stalk just as it comes from the field.

MISSOURI, KANSAS AND NEBRASKA.

James Norman is about to build an elevator at Talmage, Kan.

A grain elevator and flouring mill are to be built at Wausa, Neb.

The Ayers Grain Co. have closed their business at Springfield, Mo.

Work has been commenced on the new 50,000-bushel elevator at Wichita, Kan.

C. S. Chapman put a Hall Grain Distributor into his new elevator at Oketo, Kansas.

Ostergard & Co. have placed a Hall Distributor in their elevator at Newman Grove, Neb.

An elevator is to be built at once in connection with the new flour mill at Blue Rapids, Kan.

Howard Miller of Battle Creek, Neb., expects to build an elevator during the coming summer.

W. H. Joslin has succeeded R. M. Brigham in the grain and lumber business at Randall, Kansas.

Jacob Gras has purchased the retail grain, flour, feed and fuel business of J. D. Paris at Olathe, Kan.

H. Work & Co., Ellsworth, Kan., have purchased the Larkin mill and elevator at that place, and will put it in active operation as soon as some

necessary repairs can be made. This will prove quite an addition to their present grain and coal business.

The Torpin Grain Co., Oakdale, Neb., has purchased from the Barnard & Leas Mfg. Co. a Corn-wall Double Acting Sifter.

Critchfield & Turner have built an elevator at Bethany sidetrack, on the Missouri Pacific Railway, six miles east of Lincoln, Neb.

The Farmers' Elevator at St. Louis, Mo., which has been in receiver's hands for nearly a year, has been sold to the St. Louis Trust Co., as trustee for the bondholders, for \$172,000. The elevator is one of the best in that city, and will be kept in operation as it has been in the past.

WESTERN.

The flour mill at Hamilton, Mont., is about to build an elevator.

Stooke & Amery have built a grain and hay warehouse at Sprague, Wash.

The Eugene Grain & Produce Company has opened up in business at Eugene, Ore.

The American Cereal Company of Chicago will build a four-story warehouse at Denver, Colo.

E. F. Chessman of Denver, Colo., has purchased a Clark-Beatty Power Grain Shovel through the Barnard & Leas Mfg. Co.

Sanford Evans has taken a partner in his grain and milling business at Genesee, Idaho, and the firm name is now Evans & Fowler.

N. C. Christenson of McMinnville has purchased from J. C. Sawyer the grain warehouse at Newberg, Ore., which he formerly owned. As he has a partner in the warehouse business at McMinnville and North Yamhill, he contemplates moving back to Newberg.

The Vogeler-Wiedemann Seed Company of Salt Lake City, Utah, recently purchased about \$3,000 of alfalfa seed from Col. John Jones of Spanish Fork. Mr. Vogeler says the cultivation of alfalfa is rapidly increasing, and that there is money in it for seed as well as for feed.

The Directors of the Shawnee Warehouse Company have had their agent, who is also a director in the company, arrested for embezzling some 18,000 bushels of grain. This is largely a farmers' concern and their warehouse is located at the mouth of Four Mile Creek, near Colfax, Wash.

WISCONSIN AND MINNESOTA.

The new elevator at Hanska, Minn., is just completed.

A farmers' elevator will probably be built at Clinton, Minn.

It is reported that another elevator will be built at Revere, Minn.

The Imperial Elevator Company will put in a lumber yard at Hallock, Minn.

An elevator will be built at Rochester, Minn., by the Cargill Elevator Company of La Crosse, Wis.

A Mr. Carmichael of Northfield, Minn., contemplates the erection of an elevator at Bismarek, N. D.

The Farmers' Elevator Association has been organized at Eagle Bend, Minn., with a capital of \$2,500.

It is reported that the American Malting Company contemplates the erection of an elevator at Rochester, Minn.

The Great Western Elevator Co. has sold its elevator at Searles, Minn., to the Eagle Roller Mill Co. of New Ulm.

Bingham Bros., recently built a new elevator at Verdi, Minn., which is equipped with the Hall Grain Distributor.

It is reported that the Peavey Elevator Co. will remodel their elevator at Wheeler, Minn., putting in dump scales, gasoline engine, etc.

It is reported that during the few months the Farmers' Elevator at Beardsley, Minn., has been in operation it has taken in 100,000 bushels of grain.

Nye, Jenks & Co. of Chicago will open a branch office at Duluth in the near future and manage the new Omaha Elevator at Superior, which is now practically completed.

The Finch-Parker Grain Company of Tracy, Minn., has been incorporated, with a capital stock of \$50,000, by Neil Finch, William F. Parker and others, all of Ada, Minn.

The Farmers' Elevator Co. of Faribault, Minn., will rebuild their burned elevator. After paying all outstanding indebtedness they have on hand about \$3,000. It is expected that a total of \$7,000

will be raised to put the business in running order again.

The Great Northern Company has let the contract for laying over 10,000 feet of water mains at Superior, Wis., to be used as fire protection for its elevators and other property.

O. Overholt has sold his elevator at Madelia, Minn., to John Westerland of Oakland, Neb., and will visit a Michigan sanitarium to see if he cannot secure relief from rheumatism.

The Bay State Milling Co., Winona, Minn., instead of erecting a large elevator, as contemplated, has leased from the Atlas Elevator Co. 150,000 bushels of storage space in its two elevators in Winona.

The Huntting Elevator Co. will remove its headquarters from McGregor, Iowa, to Minneapolis. The company operates 80 elevators on three divisions of the Milwaukee road in Iowa and South Dakota.

George R. Fetherston of Janesville, Wis., has been using his new elevator since last November, but it is still more or less incomplete. He has steel on the ground for siding it, but before doing so he will put in some tie rods, make some changes in loading spouts, etc., then, when the siding is on, the house will be painted.

THE DAKOTAS.

Otto Davidson has purchased Burgess & Dillenbeck's elevator at Binford, N. D.

It is reported that a 20,000-bushel elevator will be built at Towner, N. D., in the spring.

The Farmers' Traffic Association, Parkston, S. D., have put in a 6-horse power gas engine.

C. H. Risser of Kankakee, Ill., has purchased the elevator at Goodrich from a farmers' association.

A farmers' elevator company is being talked of to be organized for the purpose of building an elevator at La Fayette, Ill.

Page Bros. have sold their elevator at Hamilton, N. D., to McCarthy Bros. of Duluth. D. Page will operate the plant for them.

The Minnesota Elevator Co. has equipped its new elevator at Aurora, S. D., with modern machinery, including the Hall Grain Distributor.

Farmers in the vicinity of Salem, S. D., have organized an elevator company which will be incorporated with a capital stock of \$2,500.

The White Elevator at Grand Forks, N. D., has been moved to a new site. It is said to be the largest moving contract ever undertaken in that section.

Walter B. Wait, a grain and stock dealer of Lincoln County, S. D., has filed a petition in bankruptcy at Sioux Falls. He claims assets amounting to \$1,930.55, with liabilities of \$12,382.21.

Lacey Brothers, who formerly conducted a grain commission business at Sioux Falls, S. D., have filed a voluntary petition in bankruptcy, showing assets of \$4,548.50 and liabilities of \$28,240.09.

The St. Anthony & Dakota Elevator Co. have equipped their elevators at Niagara and Petersburg, N. D., with Evans Wagon Dumps. They have also purchased an Evans Dump for their new elevator at Bisbee, N. D.

The Farmers' Cooperative Elevator Company of Hurley, S. D., has been incorporated, with a capital of \$10,000. The incorporators are: E. C. Rundell, J. B. Gorton, Edward J. Brier, G. H. Howell, John G. Shanks, John Parsons and D. W. Fairchild.

The elevator capacity at Petersburg, N. D., has been increased 90,000 bushels in the past four or five months. This capacity was secured by the new elevator of M. N. Johnson, 30,000 bushels; A. Cornwell's new elevator of 20,000 bushels' capacity, and the 40,000 bushels' increased capacity of the St. Anthony & Dakota Elevator.

CANADA.

The Canadian government is to be asked for a grant toward erecting an elevator and wharves at Sorel.

Levi Hawk of Newton, Ont., has purchased the grain warehouse of Tolson Bros., located at Oil Springs, and will reopen it.

President E. L. Drewry, of the Winnipeg Board of Trade, in his recent annual address, professes to see much good in the proposed amendment of the grain inspection act. He thinks that chief or final inspection at Winnipeg would centralize the grain business there and materially facilitate the earlier realization on sales, and in certain cases enable the owner to obtain better figures. In case the owner was not satisfied with inspection, he would have time to order the car held out for re-inspection at Fort William, or otherwise disposed of.



John Stoddart has opened a hay and grain store at Streator, Ill.

Enos Carr, a hay dealer of Ida Grove, Iowa, is reported as having sold out.

Dr. J. H. Sale of Murray, Ky., has invented a hand hay press, of simple construction, which works with a lever.

Thomas M. Kehoe, who has been for ten years a railway station agent at Clay City, Ind., is now in the wholesale hay and coal business at Terre Haute.

Mark H. Thompson & Co. (incorporated), dealers in hay, grain, etc., at 616 W. Thirty-sixth street, New York, have made an assignment to Arthur M. Sanders. Liabilities, \$8,000.

A. D. Campbell of Peoria, Ill., has been in New Orleans recently, for the purpose of establishing a branch office for the exportation of hay to Europe. Peoria is rapidly becoming an important center of the hay trade.

A shed at Boston, Mass., belonging to the Boston & Maine Railway Co. and leased by Lord & Webster, hay dealers, was completely destroyed by fire March 5. The loss is estimated at \$12,000 on the shed and \$8,600 on contents, insured.

George Rumschlag's hay and feed store at Tiffin, Ohio, was destroyed by fire March 6, about 3 a. m. About 100 tons of baled hay and several tons of straw, besides grain and farming implements, were destroyed. Loss, \$2,000; insurance, \$600.

Three cars of hay were attached by S. Abdelnour at Fall River, Mass., recently on a claim against Bloomingdale, the Boston hay dealer. The hay had been shipped to E. L. Fisher & Co., but was sold under the attachment in favor of Abdelnour.

Hay prices in Southern California have advanced sharply of late, owing to the prospect of a dry season. The farmers are said to be holding back their stocks of hay in hope that prices may reach last year's figure of \$22. At San Diego hay is now selling at \$15.

Chippewa County, on the extreme eastern end of the northern peninsula of Michigan, has become noted for its production of hay. Sault Ste. Marie is the central market in this county, and the shipments during the present winter will be about 10,000 tons.

Alexander F. Fisher, who has been in the hay commission business in New York City for some time, has formed a partnership with S. Henderson, and the firm will hereafter be known as Alexander Fisher & Co., with main office at 39 Cortlandt street, New York.

Theo. P. Huffman & Co.'s hay and straw storage shed on the North River front at Thirty-fifth Street, New York, was destroyed by fire February 19. The building was owned by the New York Central Railroad Company and was valued at about \$10,000, and was fully insured. About 25 carloads of hay and straw, worth \$3,800, were destroyed, insurance \$3,000.

Hay prices in Canada seem to have been advanced to artificial figures by the recent government demand for shipment to South Africa. The reaction has already set in and purchases which were contracted for at interior points a short time ago are now found to have been too high. The supply is too great to warrant the holding up of prices for any considerable time.

The following advance in hay freights have been made under the new classification: Chicago to New York, from \$5 to \$6 per ton; Saginaw, Mich., to seaboard points, advanced from \$4.45 to \$5.40; Toledo, Ohio, to seaboard, from \$3.75 to \$4.60; New York State to New York and Boston, from \$2.75 to \$3.22. While the new classification is effective in Ontario, no advance has yet been made in rates from the Province of Quebec.

James Scott, of the hay and grain firm of James Scott & Co., Montreal, has withdrawn from that firm to take the agency for Canada for the Indo-Egyptian Hay Compress Company of Boston. The company is putting in a 5-press plant at St. Johns, P. Q., which will have an output of 75 tons a day. These are the presses which have been used by the Canadian government in compressing hay for ship-

ment to South Africa, the bales measuring only 60 cubic feet to the ton, against about 170 cubic feet per ton of the ordinary square bale.

Luehrmann Bros. Hay & Grain Company of St. Louis, Mo., has been incorporated, with a capital stock of \$10,000, by George E. W., August F. W., Edward H. and William H. Luehrmann.

A bill has been introduced into the Maryland Legislature and referred to the city delegation, requiring all dealers in hay and similar farm products, who trade at hay scales or within two miles of them, to take out a license of \$250 a year. A penalty of \$50 is provided for each violation.

A new hay warehouse has been completed by the Northern Central Railway Company at Monument and Constitution streets, Baltimore, Md. It has a capacity of about 200 carloads, and will be operated, under lease, by the Terminal Warehouse Company of Baltimore. All carloads of hay or straw arriving in Baltimore will be unloaded in the warehouse, subject to the regulations of the Terminal Warehouse Company, which will be responsible for the proper storage and delivery to consignees.

REVIEW OF CHICAGO HAY MARKET.

The prices ruling for hay in the Chicago market during the past four weeks, according to the Daily Trade Bulletin, were as follows:

During the week ending February 17: Sales of Choice Timothy ranged at \$11.50@12.00; No. 1, \$10.75@12.00; No. 2, \$10.00@10.50; No. 3, \$9.00; Not Graded, \$8.00@10.00; Thrashed, \$7.50; Choice Prairie, \$8.50@9.50; No. 1, \$6.50@9.50; No. 2, \$6.00@8.00; No. 3, \$6.00; No. 4, \$5.50@5.75. Rye Straw sold at \$6.50@8.00, and Oat Straw at \$5.25@5.50. The receipts for the week were 3,883 tons, against 3,278 tons for the previous week. Shipments for the week were 216 tons, against 233 tons for the previous week. A rather quiet and firm market was experienced. The arrivals were only moderate, and the local demand fair, especially for Timothy. Prices exhibited little change.

During the week ending February 24 sales of Choice Timothy ranged at \$11.50@12.50; No. 1, \$10.50@12.00; No. 2, \$10.00@10.50; Not Graded, \$8.50@10.00; Choice Prairie, \$9.00@10.00; No. 1, \$8.00@9.50; No. 2, \$6.00@7.00; No. 3, \$5.50@7.00; No. 4, \$5.75. Rye Straw sold at \$7.50@8.00, and Oat Straw at \$5.00@5.75. The receipts for the week were 2,877 tons, against 3,883 tons for the previous week. Shipments for the week were 35 tons, against 216 tons for the previous week. The market for Timothy Hay ruled quiet. The arrivals were only fair, and a moderate inquiry existed for choice grades. Low and medium grades were dull. Prices ruled steady. Prairie Hay was firm, the offerings being only moderate.

During the week ending March 3 sales of Choice Timothy ranged at \$11.50@12.00; No. 1, \$10.50@11.50; No. 2, \$10.00; Not Graded, \$7.00@10.25; Choice Prairie, \$9.00@10.00; No. 1, \$9.00@9.50; No. 2, \$6.00@9.00; No. 3, \$6.00@6.50; No. 4, \$5.00@5.50; Not Graded, \$6.50. Rye Straw sold at \$7.00@8.00, Wheat Straw at \$5.25@6.00, and Oat Straw at \$5.25@5.50. The receipts for the week were 4,124 tons, against 2,873 tons for the previous week. Shipments for the week were 22 tons, against 35 tons for the previous week. Although the arrivals of Timothy Hay were only moderate during the week, a rather dull market was experienced. The local demand was fair, and there was no inquiry for shipment. Prices showed no material change, and the market closed steady. Prairie Hay was firm throughout the week. The demand was good, and offerings fair. All choice grades met with a ready sale. Prices ruled steady.

During the week ending March 10, sales of Choice Timothy ranged at \$11.50@12.00; No. 1, \$10.75@11.50; No. 2, \$9.50@10.50; Not Graded, \$6.50@10.50; Choice Prairie, \$9.00@10.00; No. 1, \$8.50@9.75; No. 2, \$6.00@8.00; No. 3, \$6.00@7.50; No. 4, \$5.00@5.50; Not Graded, \$5.00. Rye Straw sold at \$7.50@8.25, Wheat Straw at \$5.50, and Oat Straw at \$4.00@5.50. The receipts for the week were 3,372 tons, against 4,124 tons for the previous week. Shipments for the week were 64 tons, against 22 tons for the previous week. The market for both Timothy and Prairie Hay ruled fairly active during the week. The arrivals were smaller and the local demand was quite good. All choice grades sold readily. Inquiry on shipping account was light. Prices exhibited no material change and the market closed rather firm.

The Minneapolis Chamber of Commerce is discussing the advisability of abolishing the clearing house system.

Charles J. Searles, a St. Louis broker, has brought suit against John S. Level and Cyrus H. Wheeland for \$10,500, which he alleges he lost through them. Level, Wheeland and others were in business as the North American Grain & Stock Exchange; it is said that Level started in business in July, 1898, with less than \$4,000 capital and quit six months later with \$100,000.

LIMITS OF SEED VITALITY.

Some time ago an article appeared in the Chicago newspapers which was written at Anderson, Ind., and dealt with the longevity of seeds. In substance the article states that archæologists had but recently explored near Anderson some of the mounds of the mound builders who inhabited this country some 3,000 years ago and found, among other things, corn in jars hermetically sealed. Dr. Cullen, a prominent scientist of Anderson, obtained some of the corn and planted it, and was surprised to see it grow. This not only to him proved its longevity, but by its wonderful growth in comparison with other corn, it also proved that corn is degenerating.

This statement was shown to Prof. L. H. Pammel, in charge of the department of botany in the Iowa State College, and botanist for the government experiment station here. In discussing it, he says:

"The statement is frequently made in the popular press that seeds have retained their vitality for a long time. Thus it is stated that wheat under some conditions has preserved its vitality for fifty or one hundred years. It has frequently been stated that wheat taken from Egyptian monuments germinated, but in not a single case is this germination authenticated. Not a single grain taken from an ancient Egyptian sarcophagus and sown by various persons has ever been known to germinate, and the conditions for preserving the seed in these Egyptian monuments is far better than in the soil. They are protected from the air and variations of temperature. The experiment which has been most talked of is that of the Count of Sternberg at Prague. He had received the grains from a trustworthy traveler, who told him that they were taken from a sarcophagus. It is said that two of these seeds germinated, but it is a well-known fact that impostures are perpetrated by the people who dispose of these seeds. In some cases they have even stripped corn, or maize, into these sarcophagi.

"Many experiments have been made, not only in this country, but in Europe, to determine the vitality of various grain seeds. Thus, barley retains its vitality better than any other cereal, and this is said to retain its vitality from eight to ten years. In the case of wheat 90 to 100 per cent germinates in from one to four years; in five to seven years, 85 to 87 per cent. In the case of rye the percentage of germination in five years dropped to 55 per cent; in seven years, 36 per cent; nine years, 13 per cent. In the case of corn, I made some experiments a few years ago to determine the vitality and found that corn which was kept in tightly closed vessels at the age of twenty years had lost all its power of germination. Experiments also indicate that corn kept even a few years became largely deteriorated and lost much of its power of germination. Even grass seeds which have been buried at some depths in the soil and in vessels tightly sealed failed to germinate after a dozen or fifteen years."—Chicago Chronicle.

FROSTED GRAIN FOR FEED.

Prof. Luther Foster of the Utah Experiment Station, in view of the quantity of wheat in that state cut off before maturity by the frost, made the composition of such wheats the subject of an inquiry with a view to discovering their value for flour and feeds. So far as the milling quality is concerned, he found that frosted wheat is always inferior to unfrosted; though the degree of inferiority depends on the stage of the grain's maturity at the time of the frost.

For mere feeding purposes there was little difference between good milling wheat and the frosted article. The differences in protein and water are no greater than occur in normal wheats of different sections, and the inferiority of the frosted wheat is due accordingly to the arrested development of the grain rather than to its constituents.

Does the same general fact hold good as to corn? Apparently not; for the newspapers say that Dr. L. C. Tiffany, assistant state veterinarian of Illinois, has decided that the epidemic of cerebrospinal meningitis among the horses of Central and Northern Illinois was caused by feeding the animals on immature and frosted corn. We have not seen the official's statement to this effect over his signature, and can therefore, but quote the common newspaper rumor, which says:

"Dr. Tiffany says that a fungus, invisible to the naked eye, has developed on this corn, which, while harmless to cattle and hogs, produces the disease above mentioned in horses." But was the fungus caused by the frost? Another curious statement attributed to Dr. Tiffany as one result of his investigations is, that "in all cases coming under his observation the injury resulted from feeding white corn. Whether the white corn is peculiarly subject to this fungus or whether the yellow corn examined had more nearly reached maturity is not stated."

All the interior Manitoba elevators are filled with wheat, 7,000,000 bushels being estimated as in store.

CROP REPORTS

A COMPARATIVE TABLE.

The following table makes a comparison of the crop and stocks in farmers' hands, with percentages and prices, for the past thirteen years:

	Crop, bu.	In farmers' hands.	P.C.	Price Mar. 1.
1900	158,700,000	29.0	.69 1/2
1899	198,000,000	29.3	.73 1/2
1898	121,000,000	22.9	1.04 1/4
1897	88,000,000	20.6	.78 1/4
1896	123,000,000	26.3	.68 1/4
1895	75,000,000	16.3	.54
1894	114,000,000	28.5	.58 1/4
1893	135,000,000	26.2	.72 1/2
1892	171,000,000	28.0	.87 1/2
1891	112,000,000	28.0	.94
1890	156,000,000	31.9	.77 1/2
1889	112,000,000	27.0	1.04 1/2
1888	132,000,000	29.0	.78 1/2

CORN CROPS OF PAST YEARS.

A comparison of the corn crop of 1899, with those of past years, is here presented:

	Crop, bu.	In farmers' hands.	P.C.	Price Mar. 1.
1900	773,700,000	37.3	.33 1/2
1899	800,500,000	41.6	.36
1898	783,000,000	41.1	.29 1/4
1897	1,164,000,000	57	.22 1/2
1896	1,072,273,000	49.8	.29 1/4
1895	475,000,000	39.2	.43 1/4
1894	589,000,000	36.4	.34 1/2
1893	607,000,000	38.5	.40
1892	860,000,000	41.8	.41 1/4
1891	512,000,000	36.4	.54
1890	970,000,000	45.9	.28 1/2
1889	787,000,000	39.6	.34 1/2
1888	508,000,000	34.9	.49 1/2

VISIBLE SUPPLY OF GRAIN.

The following table shows the stocks of corn, wheat and oats in farmers' hands March 1, as reported by the Statistician of the United States Department of Agriculture:

States and Territories—	Corn, bushels.	Wheat, bushels.	Oats, bushels.
Maine	98,308	11,425	1,685,266
New Hampshire	213,886	1,055	366,606
Vermont	564,609	25,062	1,544,140
Massachusetts	434,851	.....	151,598
Rhode Island	108,186	.....	27,657
Connecticut	647,932	1,702	152,266
New York	5,305,720	2,522,075	20,430,724
New Jersey	4,273,264	518,771	891,006
Pennsylvania	15,699,790	7,165,523	17,225,134
Delaware	2,137,237	233,139	105,626
Maryland	6,682,476	2,463,522	452,411
Virginia	12,905,933	1,519,308	1,543,655
North Carolina	14,698,457	978,767	957,442
South Carolina	7,520,935	154,202	241,918
Georgia	15,922,447	384,033	557,941
Florida	1,935,481	.....	41,659
Alabama	15,517,106	68,990	421,690
Mississippi	19,131,419	6,002	136,574
Louisiana	10,876,625	.....	55,328
Texas	29,214,593	1,356,695	3,072,236
Arkansas	20,196,599	507,874	1,789,333
Tennessee	21,599,194	1,824,400	1,491,348
West Virginia	6,134,819	1,280,648	979,120
Kentucky	18,833,514	1,804,346	2,376,494
Ohio	34,667,086	14,599,282	11,531,092
Michigan	9,031,959	4,090,558	11,627,638
Indiana	52,485,460	6,086,682	10,976,399
Illinois	88,974,120	2,026,466	44,547,632
Wisconsin	13,756,509	4,356,151	27,751,826
Minnesota	12,156,796	23,196,018	25,290,440
Iowa	84,787,444	5,852,556	38,095,725
Missouri	55,311,122	2,507,714	7,104,772
Kansas	92,672,277	9,481,691	15,651,764
Nebraska	85,201,842	6,653,368	19,550,166
South Dakota	9,305,399	10,186,652	7,206,171
North Dakota	160,514	11,356,899	8,513,958
Montana	3,630	573,739	834,288
Wyoming	10,789	59,342	66,344
Colorado	756,987	2,054,579	832,698
New Mexico	57,636	412,777	21,364
Arizona	.....	30,793	.....
Utah	32,533	934,114	174,447
Nevada	.....	109,921	.....
Idaho	.....	1,238,437	488,986
Washington	37,259	7,815,742	1,091,567
Oregon	56,509	7,682,335	2,098,651
California	430,353	12,147,897	479,385
Oklahoma	3,040,010	2,754,470	.....
Indian Territory	.....	.....	.....
The United States	773,723,528	158,745,595	290,937,335

A late February report from Colfax, Wash., says that fall-sown grain in that vicinity has not been in the least injured by the winter weather.

The published estimate of the Russian statistical committee places the Russian wheat crop at 456,000,000 bushels, which is understood as including Siberia.

Reports from Iowa predict that the corn area will be larger this year than usual, from the fact that grasshoppers last season ruined a great many meadows.

The wheat crop of Western New York has been affected by many sudden changes of the weather this winter. Only 25 per cent of correspondents report wheat in good condition.

The condition of the Ohio wheat crop as indicated by the state report of March 1, was only 56 per cent of an average crop. This is a drop of 19 points since January 1. The causes of the poor condition of wheat in Ohio are Hessian fly and insufficient root protection. Early sown wheat was

ruined by the fly and late sown was winter-killed. A warm, wet spring may make some improvement.

Wheat prospects in Texas are reported exceptionally good. Farmers are sowing spring oats in unusual quantities, owing to damage to winter oats. Corn planting is in progress and there will be an increase in corn acreage.

Wheat is in excellent condition in Illinois and gives promise of a large crop. Reports of damage are few, and some correspondents report that wheat is in the best condition it has been at this season for many years. Rye also is reported in good condition.

Of 650 correspondents who contributed to the Michigan State crop report, 354 reported injury to wheat during the month of February. This agrees with general observations on conditions in Michigan, which show that wheat has not been sufficiently protected by snow.

Kansas crop reports indicate excellent winter conditions for crops of all kinds, including wheat. An even blanket of snow has covered the ground and furnished abundant moisture. Spring sowing of wheat will be large, thus insuring a full crop in sections where winter wheat was not sown largely.

In Jefferson County, Texas, the rice crop for the coming season is expected to be very profitable, one authority predicting that the farmers of that county will receive more money from their rice crop than will the farmers of any other county in Texas receive from any other single product of the soil.

Advices from Wabash, Shelbyville, and Richmond, Ind., agree that wheat in Wabash, Shelby and Kosciusko counties has been badly winter-killed and will not harvest much more than half a crop. In many of the northern counties of the state wheatfields will be plowed up and sown to other crops.

Replies from 130 correspondents in Kentucky to inquiries made by the Commissioner of Agriculture of that state indicate the acreage condition of the wheat crop as 97, which is 16 points above the average for the past four years, and 17 points above the condition in March 1, 1899. In many counties the corn crop of 1899 was practically a failure, and it has been necessary to import corn to supply the deficiency.

THE GOVERNMENT CROP REPORT.—The March report of the Statistician of the Department of Agriculture shows the amount of wheat remaining in farmers' hands on March 1 to have been about 158,700,000 bushels, or 29 per cent of last year's crop, as compared with 198,000,000 bushels, or 29.3 per cent of the crop of 1898, on hand on March 1, 1899.

The corn in farmers' hands is estimated at 773,700,000 bushels, or 37.2 per cent of last year's crop, against 800,500,000 bushels, or 41.6 per cent of the crop of 1898, on hand on March 1, 1899. The proportion of the total crop of last year shipped out of the county where grown is estimated at 16.8 per cent, or about 348,000,000 bushels. The proportion of the total crop of last year that was of a merchantable standard is estimated at 86.9 per cent.

Of oats there are reported to be about 290,900,000 bushels, or 36.5 per cent of last year's crop, still in farmers' hands, as compared with 283,000,000 bushels, or 38.7 per cent of the crop of 1898, on hand on March 1, 1899.

THE THRASHING MACHINE ENGINE AS A ROAD MOTOR.

A South Dakota farmer, named A. J. Wakefield, who lives in Faulk County, has achieved newspaper fame by making use of the thrashing machine engine as a traction motor, being therefore hailed a great and original discoverer. Coupling five wagons together tandem, he hauled them and their contents of 490 bushels of wheat fifteen miles to his railway station in six hours, and threw the entire contingent of newspaper reporters into a spasm of enthusiasm over the discovery of an inventive phenomenon.

As the traction engine has been hauling thrashers and their tenders and so on about the country for some years now, the hubbub over Mr. Wakefield's feat seems to be somewhat gratuitous. Generally speaking, the general use of the thrasher engine as a traction motor is not more common because it has not been economical as compared with horses for the purpose of moving other vehicles than itself, its tender, and the thrasher, from place to place. If Mr. Wakefield in South Dakota can make it pay there for general traction purposes, he is fortunate; and the country must be congratulated on the possession of such good roads and strong road bridges.

To some slight extent the engine has been used

for working plows in the Dakotas for breaking raw prairie land.

OUR CORN PRODUCTION AND EXPORTS.

[From a paper read by J. G. Kingsbury at the Corn Growers' Association, Wednesday, March 7, published in the Indiana Farmer, March 10.]

The total yield of corn for the entire country, according to the reports for 1898, was 1,924,184,660 bushels. This was the seventh largest yield in 33 years. The largest yield was that of 1896—2,283,875,165 bushels. The next in 1895—2,151,138,500, next in 1889—2,112,892,000 bushels. Other big yields were those of 1888, 1,987,790,000; 1895, 1,936,176,000; 1897, 1,902,967,000. The smallest yield in the past ten years was that of 1894, 1,212,770,000 bushels.

The big corn states as given in the last published report, 1898, are, in their order of yield, Iowa, 254,999,000 bushels; Illinois, 199,959,000; Nebraska, 158,754,000; Missouri, 154,731,000; Kansas, 132,942,000; Indiana, 129,154,000; Texas, 105,336,000; Ohio, 102,828,000; Kentucky, 85,177,000; Tennessee, 76,467,000 bushels. All the other states gave yields below 50,000,000 bushels each.

The average yield per acre as shown in the tables, is a surprise to many western corn-growers. Bleak and rocky Maine shows 40 bushels per acre, New Hampshire 41, Vermont 43, Massachusetts 40, Connecticut 37, New Jersey 37, New York 33, Pennsylvania 37, while our rich western soil shows like this: Iowa 35 bushels, Illinois 30, Indiana 36, Michigan 34, Kentucky 37, Missouri 26, Kansas 16, Nebraska 21, California 24 and Oregon 26.

If this association can, within five years, bring the average yield of Indiana up to that of the New England States, it will have accomplished a grand result and amply rewarded the originators of the movement.

The greatest average yield of the principal corn-growing states, since 1894, was in 1898 for Indiana, 36; 1896 in Illinois, 40.5; and the same year in Ohio, 41; Michigan, 38; Wisconsin, 37; Iowa, 39; Nebraska, 37; California, 37; Kansas, 28 bushels. Missouri's best year was in 1895, 36 bushels.

The best prices during the five years from 1894 to 1898 were in 1894, 45.7 cents. The average price in 1898 was 28.7 cents; in 1897, 26.3 cents per bushel.

The highest average prices in 1898 were received in the New England States, where they ranged from 44 to 64 cents. In New York the average was 43 cents, while in Kentucky and Ohio it was 27 cents, in Indiana 25 cents, in Iowa 24 cents, Kansas 27 cents and in Nebraska 22 cents.

The figures regarding the exports of corn are of full as great interest as those relating to production. The Eastern States export almost no corn, and even New York state sent away less than half a million of the 15,671,000 bushels she grew. Pennsylvania exported 1,213,000 bushels from her 45,190,000 of that year's crop.

The largest corn exporting state is Illinois, 79,983,000 bushels; next, Iowa, 76,499,000; then Nebraska, 50,801,000; Indiana, 42,521,000; Ohio, 22,622,000; Kansas, 21,254,000; Texas, 15,800,000; Tennessee, 13,764,000; Kentucky, 11,073,000, and Missouri, 10,831,000.

In 1894 the total value of our corn exports, including meal, was \$30,981,000; in 1895, \$15,298,000; in 1896, \$38,490,000; in 1897, \$54,989,000, and in 1898, \$75,962,000. With the exception of 1895 the increase in the foreign demand has been constant and rapid.

As to destination, it appears that the United Kingdom took \$29,580,758 worth of our corn in 1898; Germany, \$14,171,961; the Netherlands, which is Dutch to us, \$7,141,473 worth. Canada took a little over \$7,847,394 worth. Next in order is Denmark, with \$5,971,615 worth; then France, \$3,985,687. She must do better than that this year, or we'll be sorry we made such an exhibit of corn as we intend doing. Then comes Belgium with \$3,080,051 worth. All corn importing nations other than these named took but insignificant amounts.

During the five years in question, Great Britain took 43.5 per cent of our corn exports, and Germany 17.15 per cent.

Of corn meal, Great Britain took an average of \$344,081 worth per annum, or 36.28 per cent of our total meal export. The British West Indies took 23.94 per cent of it, and Canada 11.24 per cent.

The demand from Germany has varied greatly from year to year, and we are unable to account for the fact. The average for the five years was in value \$7,237,505; in 1894, \$5,339,631; in 1895, only \$1,672,539; in 1896, \$5,121,573; in 1897, \$9,881,821, and in 1898, \$14,171,961. Our German friends are evidently learning to like mush and corn bread better than formerly, or else, and that is our fear, they have learned to use the corn in place of malt for their lager beer.

The Washington prison authorities have fixed the price of grain sacks for the season at 5.9 cents each.

OBITUARY

C. R. Alden, a grain dealer of Victoria, Texas, died recently.

Mr. Patrick, senior partner of the firm of Patrick & Keel, wholesale grain merchants, of Gainesville, Texas, died recently.

James Stewart, of the former firm of Stewart & Langenheim, Pittsburg, Pa., and well known in business circles in that city, died recently.

Thomas Patterson, a grain merchant at Leonore, Ill., died at his home in that town, February 2. Mr. Patterson formerly operated an elevator at Wilsman and was an influential and well-known citizen.

Fred Henne, a grain merchant of Greenville, Ohio, died February 26, at his home in that town, after a short illness. He was in business with his brother as successors to their father, who died recently.

James Lawrence Dorsett died March 9, at the Holland Hotel, Chicago. For twenty-five years Mr. Dorsett was a member of the Chicago Board of Trade. Mr. Dorsett is survived by his widow, two sisters and one brother, all of Chicago.

Elmer D. Carter died at his residence in Austin, Ill., a suburb of Chicago, February 28, aged fifty years. Mr. Carter was grain inspector for the Chicago, Milwaukee & St. Paul Railroad Company, and had been a resident of Chicago for about fifteen years.

William I. Preston, a grain commission merchant and member of the Produce Exchange of New York, died at his home in that city March 3, in his seventy-second year. At one time he was a member of the firm of H. D. Walbridge & Co.; later he started in business for himself.

Isaac T. Sunderland, an old citizen of Chicago, and well known on the Chicago Board of Trade, died February 19 at his home in this city. Mr. Sunderland was nearly 70 years old, and had been in feeble health for several years. Until about a year ago he had been provision inspector on the Board of Trade.

Thomas W. Booth, president of the J. W. Booth & Sons Commission Company of St. Louis, died March 2, after a short illness, at the age of 31 years. Mr. Booth was a young man of great promise in the business world, a genial companion and whole-souled friend, and his death was a shock to all who knew him.

Joseph Stringham died February 15 at his home in Oshkosh, Wis., in his ninetieth year. Mr. Stringham was once treasurer of New York state, and for a time was editor of the Buffalo Courier. He had been mayor of Oshkosh and was regarded as one of its leading citizens. For years he was engaged in the grain business and conducted elevators in Oshkosh and other cities.

Richard S. Davenport died at his home in Brooklyn, N. Y., February 5, in his 84th year. Mr. Davenport was born at Bellmore, L. I., in 1816. He was in the grain commission business with Marsh, White & Co. of Manhattan, remaining with them for forty years. He was in active business until his fatal illness and was in constant touch with current events. He is survived by his wife, two sons and a daughter.

N. B. Ashley, a grain commission merchant of Scranton, Pa., died March 4, at his home in that city. He was suddenly stricken with heart failure and died in a few minutes. Mr. Ashley was born in Camden, N. J., and was nearly 66 years old when he died. He had lived in Scranton for thirty-one years, and only recently had started in the grain business for himself. His widow, two sons and a daughter survive him.

Samuel Besick, an old and well-known character on the Chicago Open Board of Trade, died at the Baptist Hospital in Chicago, February 11. Sewed in his clothing was found money and securities valued at \$5,000, including fifteen \$100 bills sewed into an inner pocket and a leather purse containing \$200 in gold under his coat collar. The coins were worn smooth and the purse was half full of gold dust. Deceased was about 60 years old and was a charity patient at the hospital.

Alonzo Haverton Failing died at his home in Oswego, N. Y., February 12, at the age of 77. Mr. Failing was a native of New York state and settled in Oswego in 1847. He was first employed as a retailer for the Fitzhugh & Littlejohn flour mills. Several years later he entered the grain business, in which he was interested during nearly all of his active business life. He was interested in the Union, the Corn Exchange and the Continental elevators and the Atlas Mills. In 1861 the firm of Failing, Dane & Co. built a floating elevator, which

was afterward taken apart and moved by canal to New York City. It was the first floating elevator in New York. Mr. Failing is survived by two daughters and one son.

Elijah Cone, aged 73 years, of Fond du Lac, Wis., was drowned in the east branch of the Fond du Lac River February 9. It is supposed that he fell into the stream while measuring the height of the water, as he was representing a local newspaper. Mr. Cone was a graduate of Yale College in the class of 1855, a professor of Greek and Latin in Cortland College, and a veteran of the Civil War. From 1882 to 1885 he conducted a grain elevator at Fond du Lac. For two years he had been doing editorial work on the Fond du Lac Daily News.

John McIntyre died at his home in East Orange, N. J., February 26, after an illness of ten days with pneumonia. Mr. McIntyre came from England twenty years ago as the representative in New York of an English grain commission house. In 1889 he organized the New York grain commission firm of Parker & McIntyre, and became a member of the Produce Exchange. He was active in church and social circles, a member of the St. Andrew's Society of New York and president of the East Orange Golf Club. He leaves a widow and three children.

Stephen M. Ratcliffe, senior member of the firm of Stephen M. Ratcliffe & Son, grain merchants, of Buffalo, N. Y., died at his home in that city, February 9, aged 80 years and two days. Mr. Ratcliffe had been a resident of Buffalo for more than 70 years. He came to this country from England in boyhood. Ten years ago he engaged in the grain business in Buffalo on his own account and continued in that business until his death. Three years ago his son, Stephen M. Ratcliffe Jr., became a partner in the business. His wife, two other sons and two daughters survive him.

Claus Hoting, one of the pioneer feed dealers of Western Pennsylvania, died February 27 at his residence in Pittsburg, Pa. He was ill with pneumonia but a few days. Mr. Hoting was born in Bremen, Germany, 60 years ago, and came to Pittsburg when a young man. Years ago he established the present grain and feed firm of C. Hoting & Sons, his four sons, Claus Jr., Rudolph C., Gustavus C. and Charles H., being identified with him in the business. Besides these sons, Mr. Hoting is survived by his wife and three younger children, Martin H., Charlotte and Margaret.

Fayette L. Simons, who was one of the charter members of the Chicago Board of Trade, died at Los Angeles, Cal., March 6, aged 71 years. Mr. Simons was born near Auburn, N. Y., in 1833, and removed in early life to Bloomington, Ill., where he remained until 1864, when he located in Milwaukee. During his residence in Bloomington he became intimately acquainted with Abraham Lincoln and Stephen A. Douglas. In Milwaukee he was one of the founders of what afterward became the Board of Trade of that city. He was largely interested in the grain business, and in 1867 was one of the charter members in the organization of the Chicago Board of Trade. He was a partner with President E. F. Ryan of the Chicago Board of Trade, and again with Joseph E. Young, of the Danville & Vincennes Railroad.

OUR CALLERS

We have received calls from the following gentlemen promptly connected with the grain and elevator interests, during the month:

H. C. Rau, Milwaukee, Wis.
Jas. McGrew Jr., Kankakee, Ill.
H. G. Struckman, Elmhurst, Ill.
F. T. Knott, of T. J. Knott & Son, Carbon, Ia.
Geo. J. S. Bromhall, Corn Trade News, Liverpool, Eng.
B. F. Ryer, representing The S. Howes Co., Silver Creek, N. Y.
E. E. Hunter, St. Louis, Mo., representing The S. Howes Co., Silver Creek, N. Y.

INDIANA CORN GROWERS.

A permanent organization was effected by the Indiana Corn Growers' Association at their convention held in the State House at Indianapolis, March 7. More than 100 people were in attendance and 59 new members joined the Association. Addresses were made by Gov. Mount, Q. Newton Brown, Prof. C. S. Plumb, of the State Agricultural Experiment Station, J. J. W. Billingsley, James Riley and E. H. Collins. Statistics were presented by Mr. Brown showing that the production of corn in Indiana for the year 1899 amounted to 151,246,804 bushels, worth \$45,337,041, exceeding in value any other agricultural product. The officers for the ensuing year are: A. O. Lockridge of Greencastle, president; James Riley of Thorntown, vice-president; H. F. McMahon of Fairfield, secretary and treasurer.

PERSONAL

H. C. Mabie is in charge of the Farmers' Elevator at Freeman.

Henry Wetzel has removed from Clara City, Minn., to Lisbon, Iowa.

Theodore Ross is now in charge of J. Quinn's elevator at Melrose, Minn.

J. S. Thompson is now in charge of the Omaha Elevator at Fullerton, Neb.

F. W. Clisby, grain dealer, has removed from Chesterville, Ill., to Arcola, Ill.

Geo. A. Grant has opened a grain store at Proctorsville, Vt., as agent for Burdett Bros., of Rutland, Vt.

J. Walter Teasdale, the St. Louis commission man, is in Maine in search of rest and recreation.

W. D. Earl has been made official grain inspector and weigher of the Columbus, Ohio, Board of Trade.

A. W. Frick, with the Van Dusen-Harrington Company of Duluth, has been recreating in California.

David Fairweather, who has been buying wheat at Argyle, Minn., during the past year, is now located at Duluth.

R. F. Wiley, who was formerly in the grain commission business at Peoria, Ill., is now traveling for a Chicago company.

H. M. Dahl has been appointed manager of the business of the St. Anthony and Dakota Elevator Co. at Bosnabrock, N. D.

Knut Sletten, who has been employed as manager of the Farmers' Elevator at Hoffman, Minn., has been succeeded by Ben Barlow.

Lawrence Buckner, who has been a grain buyer at Williamsburg, Ill., is now with the Bartlett & Kuhn Company at Cadwell, Ill.

Edward J. Martin, an employe of the Chicago grain inspector's office, was married February 12 to Miss Lizzie Slyfield, of Galena, Ill.

L. Moore, formerly with John G. Hermann, grain dealer, of Ashmore, Ill., is now employed in the elevator and warehouse of C. R. Mitchell of Ashmore.

F. H. Peavey of Minneapolis is preparing to go abroad with his family, sailing from New York in May, and expects to remain in Europe during the summer.

F. S. Cowgill, of the Trans-Mississippi Grain Co., Omaha, Neb., has visited the southern states recently in the interests of the southern business of his company.

W. D. Haggard, who has been with Bartlett, Kuhn & Co. at Cadwell, Ill., as grain buyer, is now in a similar position with Davis Bros. at Williamsburg, Ill.

Lient-Gov. Smith of Minnesota has been mentioned as a probable appointee to the railroad and warehouse commission of that state. Other prospective candidates are A. N. Dare, the present speaker of the House, and C. F. Staples, a prominent Republican legislator.

Thomas S. Maguire, who is a candidate for railroad and warehouse commissioner of Missouri on the Democratic ticket, was born in St. Louis, January 27, 1856. He lived on a farm until he was 21 years of age. He has been employed on railroads, rising from the position of woodsawyer to passenger conductor.

Dexter M. Ferry of Detroit, the prospective Republican candidate for governor of Michigan, is best known as a great seedsman. He began as a farm hand and received his education in the district schools. In 1852 he went to Detroit and secured an interest in a small seed store, which was the humble beginning of his present great business. Mr. Ferry is now in his sixty-seventh year.

J. W. Fisher, founder of the grain firm of J. W. Fisher & Co., Cincinnati, Ohio, in 1852, celebrated the fiftieth anniversary of his marriage February 21, 1900. He married Mary E. Day of Rising Sun, Ind., February 21, 1850, and at that time was not quite 20 years of age. The marriage was held in church and of the invited guests only four are known to be living to-day. Two sons, Charles S. and Albert, both members of the firm of J. W. Fisher & Co., which for nearly half a century has been in business in Cincinnati, were present at the celebration of the wedding.

The Illinois seed men are talking of an organization for the purpose of registering the different prominent varieties of seed corn. Their object is to prevent inferior seed from passing under the names given in the seed market to registered seed.

FLAXSEED

Leeds, N. D., wants a flax fiber mill.

Capitalists of Medina, N. D., are interested in establishing a flax fiber mill at that place.

The flax fiber mill at Sheldon, N. D., is said to have paid to farmers over \$8,000 since it started.

The Emmetsburg, Iowa, Democrat states that indications point to a scarcity of flaxseed in that locality for the spring sowing.

Hawley, Minn., wants a flax fiber mill; citizens are holding enthusiastic meetings and will offer liberal inducements to secure such a mill.

The Canadian minister of inland revenue has asked the Winnipeg Board of Trade for information as to the establishment of grades for flaxseed.

The farmers of Northern Minnesota are said to be contemplating flax growing on a large scale as the result of the high prices of North Dakota flax during the past season.

A Chicago director of the American Linseed Company has recently expressed the opinion that the common stock will sell at near 50 within the year if the present conservative management is retained.

A story is told of a farmer of Western Walsh County, North Dakota, who harvested 2,500 bushels of flax from 100 acres of a \$750 farm, and is selling it all at home for seed at \$1.75 a bushel—\$4,375 from a \$750 farm in one crop.

The committee of Grand Forks (N. D.) citizens, consisting of George B. Clifford, W. L. Wilder and Frank S. Lyeon, who were appointed by the Business Men's Club to secure a flax fiber mill for Grand Forks, report that the prospects for securing such an institution are good.

A car containing 780 bushels of flaxseed, valued at over \$1,000, was recently shipped from Butler County, Kansas. It is said to have been the largest and most valuable carload of flaxseed ever shipped from that section. It thrashed 17 bushels and brought the growers \$22.10 per acre.

The Superior Leader is advocating the establishment of a flaxseed mill at Superior, Wis., and presents facts and figures to prove that one of the greatest flax-producing centers in the world is at their doors. The shipments of seed from the head of the lakes in 1899 are said to have aggregated over 7,000,000 bushels.

The French-Hickman Co., which has established a flax fiber mill in Fargo, now contemplates the building of a similar plant in Valley City, N. D., which is a center of flax culture. The citizens of Valley City have been asked to donate a site of about ten acres and to extend the water mains of the city for fire protection. A business men's union has been organized to insure the location of the new plant.

President Major, of the American Linseed Company, says that the great volume of business of this company is keeping up and that the year will show large profits. The report of the chartered accountants, who have audited the books of the company for the first twelve months since its organization, will not be made public until it is presented to the stockholders at the annual meeting April 10. The fiscal period may be changed from March 1 to August 1, to correspond better with the conditions of the oil trade.

The Northwest Flax Fiber Manufacturing Company has been conducting experiments at Scio, near Portland, Ore., during the past year, to discover a method of preparing flax fiber so cheaply that it can entirely replace jute in the manufacture of grain sacks, and to make other improvements in flax manufacture. The company has an improved thrashing machine, which preserves the straw intact while the seeds are knocked off. This is accomplished by a series of double fingers, placed at short intervals on an endless chain. Into these fingers, which open and close, the bundles of flax are placed, and the straw is held tightly while the heads are carried against rapidly revolving cylinders that remove the seed. The owners claim that they lose only 4 or 5 per cent of the seed in their thrasher, against an ordinary loss of about 20 per cent. They propose to furnish flax tow to the Washington State Penitentiary for the manufacture of grain sacks.

The National Flax Fiber Co., which has established mills at Sheldon, Moorhead, Mayville, Amedia and other North Dakota towns, has recently purchased the entire village of Slaterville, R. I., including six cotton mills, sixty dwelling houses, 750 looms and 25,000 spindles. The cost of the property was about \$500,000. The company will convert the mills from their former use to the manufacture of fine fabrics from North Dakota flax fiber, which will be put through the preliminary processes at the western mills and then will be

shipped to Slaterville. This company controls processes of flax manufacture which are said to be a great improvement over the old methods. European methods, which require four weeks to prepare the flax and much hand work, are displaced by the new system, which accomplishes better results at a fraction of the cost by machinery in a few hours. It is said that by this method, for the first time in the history of linen making, crude straw, which goes into the mill in the morning, comes out in the form of textiles in the afternoon. By this method, also, the cost of flax fabrics will be greatly reduced.

Items from Abroad

British farmers are not a little disappointed that the South African war has as yet had no effect in raising prices of grain.

The corn crop of the Argentine is said to have been fired by the almost unprecedented heat of the first few days of February.

H. C. Woodward & Co., grain merchants at Liverpool, have dissolved partnership. J. Wilson & Son succeed to the firm's brokerage business.

The new elevator at Avonmouth will have capacity of 560,000 bushels. It is to be one of the best plants of the kind in the British Islands.

The Argentine seems to be getting all the trade benefits of the Boer war. Its shipments of corn, hay and live stock to Africa have been very large of late, being closer to the scene of the war than any other exporting country.

The Milborne Farmers' Club has formally protested against the English government's buying of forage in America—or, as the resolution says, "neglecting the English local markets for the purchase of forage for the army in South Africa."

The new grain elevators at Novorossisk, South Russia, have a capacity of 18,000,000 bushels. They are of the latest English pattern, and have three engines of 250, 600 and 300 horse power each, with adequate machinery for the quick handling of grain.

Minister Thomas at Stockholm says the crops of Sweden in 1899 were "below the average." For the preceding twenty-five years the crop of only one year—1881—has been classed equally low. The imports of wheat and rye were in 1899 the largest on record.

The new crop Plate wheats are said to be unusually fine, certain samples being extra heavy (61 to 64 pounds in some samples), clean, bright, thin-skinned and glutinous. If later shipments continue as fine as the earlier ones, the Plate wheat this season will certainly be the first choice of English millers.

The British Grain Drying Company of London is in collision with the health officer, whose expert finds that the fumes of drying grain are obnoxious to the neighbors. The Sanitary Committee notified the company that proceedings would be instituted against it unless effective steps were at once taken to remedy the nuisance.

The United States consul at Vera Cruz, Mexico, has reported to the state department that, owing to lack of rain, the corn crop has been short in his district, and corn will have to be brought from other parts of the country, as it is virtually the staff of life for a large majority of the inhabitants. He suggests that United States exporters give the matter attention.

The Nacion of Buenos Ayres estimates the Argentine wheat crop just harvested as 35 per cent larger than the great crop of a year ago. This would mean about 143,867,000 bushels. The wheat export of the Argentine for the calendar year 1899 was 65,694,489 bushels. On a basis of the above estimate, the wheat available for export from the present crop should be about 100,000,000 bushels.

The government statistical department of Germany has published the following figures for the year 1899, expressing in metric hundredweights (220.46 pounds) the grain imported and exported:

	Imports.	Exports.
Wheat	16,000,148	3,339,391
Rye	5,907,101	1,528,402
Oats	3,055,881	1,031,573
Barley	11,102,877	279,044

The Argentine Congress has passed a law for the development of the port of Rosario. The works contemplated are to be completed within five years. They comprise the establishment of 10,000 feet of quays, capable of accommodating vessels drawing between 21 feet and 22 feet water, as well as the construction of docks, grain elevators, railways, hydraulic cranes, etc. In the item of saving, alone, which will be effected by the farmers in the millions of bags which they will not require to buy, there would be sufficient money for the construction of four or more of the ten or twelve elevators at

Rosario and in the interior, which will, just now, be necessary to attend to the exigencies of production, says the Prensa.

The Australian Millers' Journal gives the estimates of the last wheat crop of the four Australias as 17,039,000 bushels. The home requirements are 23,194,000 bushels, leaving 23,845,000 surplus available for export. To this last total may be added a surplus of 2,400,000 in New Zealand.

A special correspondent writes to the Country Gentleman that "the production of wheat in Italy last harvest was, according to the Bollettino di Notizie Agrarie, 133,650,000 bushels, this yield being rather above the outturn of 1898, which is now put at 133,100,000 bushels. The average annual yield of the preceding five years amounted to 118,008,000 bushels, or over 15½ million bushels below that of last harvest. Still I cannot bear that farmers in Italy have a very prosperous life of it. Militarism and taxation grind the life out of them; hence the numbers who arrive at the wharves of your New Orleans."

The firm of Pitts, Son & Kiug, one of the oldest grain importing firms of the west of England, having been founded in 1804, has gone into voluntary liquidation. The firm was very successful until 1895, when it was reorganized as a limited liability company with a capital of \$1,000,000, of which \$850,000 was allotted to the members of the Pitts and Kiug families. After three years of unsatisfactory trading, a dividend was paid of 6 per cent on ordinary shares, and a contract made for new premises. By 1899, however, the business had gotten well tangled up, and the petition for liquidation is the result. All of which goes to show that a joint stock company may not always be as successful as one managed as a private business.

The English certainly must have a penchant for the meat pie. Dickens' characters were forever eating them—when they didn't have the cold leg of mutton. And the bigger the better. Recently one was "built" for sixty-five fishermen at Gorleston, near Yarmouth—a "sea pie," with three decks, the "cockpit" being filled with beef and bones, covered with Deck No. 1; then more beef, pork, liver and kidneys, topped by Deck No. 2; this supported a layer of potatoes and onions under Deck No. 3, a crust several inches in thickness, and all weighing 150 pounds and requiring half a day to cook. This particular pie celebrated the great herring catch of the past season; but a similar pie is eaten annually, it is said, in a certain English village, in commemoration of the repeal of the corn laws in 1840.

Dr. Max Grabein has published a pamphlet recommending the adoption by the German Empire of a system of sliding scale for grain duties, the object of which is to maintain fixed prices in the Empire. Dr. Grabein thinks that 185 marks per ton (\$1.20 per bushel) for wheat, 165 for rye, 155 for barley, and 145 for oats a good minimum! The objection that the sliding scale duties proved a failure in the early part of the century this alleged economist meets with the statement that "local conditions then dominated the markets, while now there is practically only one price for the civilized world, and the duty should be measured by the difference between the world's price and the artificially fixed price." One wonders when the slavery of the German consumer to the farmer will reach its limit!

Although France, by means of high import duties on wheat, has, as the agrarians say, become self-supporting as to bread, still the farmer is not satisfied. There is too much wheat, and the price in France at February 23 was nearly 18½ cents per bushel less than in London, although the French import duty is about twice that amount. The proposal to pay a bounty on export wheat is opposed by the millers (who want the bounty paid on flour), because the wheat bounty would have a tendency to increase the price of the raw wheat without helping the exportation of flour. So there is a fine quarrel on between the millers and the farmers as to who shall gather the very small crop of plums provided by the Chamber; for the budget appropriates only \$100,000 for payment of the bounty in any case.

The annual banquet of the British Channel and West of England Corn Trade Association was held at Bristol on February 16. J. A. Fluck of Gloucester, responding to the vice-president, voiced a familiar American complaint in the same line of trade, to wit, of the meager profits of the trade, considering the skill and intelligence embarked in it. He thought there was no corresponding business where brains and money were so poorly remunerated. Mustard, he said, had its millionaires, but the corn trade had no merchant princes. Very often they had themselves to blame for not being able to make better profits. They cut things so fine that sometimes they did not know whether there was a profit or whether it was an optical delusion. In the past year there had been no considerable losses, but there had not been much profit.

BARLEY AND MALT

The capital stock of the Western Malting & Elevator Company of Chicago has been increased from \$10,000 to \$20,000.

The Milwaukee Elevator Company has bought from Barnard & Leas Manufacturing Company a tubular barley cleaner.

A. H. Bullen of Chicago, representing a syndicate, has bought the malt house of the Minnesota Malting Company at Red Wing, Minn.

Friedrich Knuettel of Charlottenburg, Germany, has secured United States patent on a malting drum. His device consists of a revolving drum for malting and drying grain, comprising an outer shell and a central perforated tube closed at one end of the drum. Perforated tubes are arranged also near the periphery of the shell, and closed at the opposite end of the drum. The entire apparatus is used in combination with a closed kiln, which supplies it with hot and moist air, and heaters are provided for the tubes also.

The receipts of barley at Cincinnati for the month of February, 1900, were 100,350 bushels, as compared with 105,905 bushels in February, 1899. The shipments of barley during February, 1900, were 59 bushels, as compared with shipments of 2,962 bushels in the corresponding month last year. The receipts of malt at Cincinnati during February, 1900, were 73,779 bushels, as compared with receipts of 73,825 bushels in February, 1899; and the shipments of malt in February of this year were 70,734 bushels, as against 65,456 bushels in the month last year.

A. L. Somers, a Chicago dealer in barley, is quoted as saying that there is an excellent demand abroad for barley for feeding purposes, some 29,000,000 bushels having been exported since last fall, and that he says he has heard no complaint as to its alleged unhealthfulness as food for hogs or other animals. "It is used as an animal food in this country," said Mr. Somers, "and has been for years without any complaints of ill effects [as charged by certain German agitators], and I am inclined to think the fault now found with it in Germany, in case the complaint actually exists, is in the nature of the periodical German complaints against anything American."

IMPORTS AND EXPORTS OF BARLEY AND MALT.

Imports—	Bushels.	Value.
January, 1899	6,943	\$3,251
January, 1900	8,051	4,041
Seven mos. ending Jan., 1899..	96,093	47,204
Seven mos. ending Jan., 1900..	179,376	85,093
Exports—		
January, 1899	339,436	235,178
January, 1900	2,252,760	1,069,096
Seven mos. ending Jan., 1899..	1,584,655	971,321
Seven mos. ending Jan., 1900..	18,172,422	8,655,566

BARLEY MALT.

Imports—		
January, 1899	800	650
January, 1900	400	325
Seven mos. ending Jan., 1899..	3,463	3,118
Seven mos. ending Jan., 1900..	2,115	1,884
Exports—		
January, 1899	17,424	13,927
January, 1900	23,689	18,516
Seven mos. ending Jan., 1899..	228,444	166,192
Seven mos. ending Jan., 1900..	167,898	121,818

STANDARDS FOR THE EXAMINATION OF MALT.

At the International Chemical Congress, held at Vienna, Austria, not long since, certain standards were agreed to. Since then Aubrey has been giving lectures at Munich on the subject, and also at a meeting of brewers, which was held at Berlin in October. As a result of the experiments of those who determined to follow the standards of examination laid down at Vienna, considerable unanimity is observed. Among those who have given evidence that the standards are good are, besides Aubrey, Reinke and Bleich. Evidently fine grinding alone is now to be a thing of the past, inasmuch as by means of it it is impossible to obtain sufficient evidence in judging the malt. It is best to take 500 grains and grind finely, and then take a further 500 grains and grind coarsely. Aubrey thinks that more accurate results can be obtained by taking larger samples, and we are inclined to agree with him. There yet remains to be determined a standard which shall be employed universally regarding what really is fine malt and what is coarse. It would be better to agree that fine malt should be such that it would all pass through wire gauze of a certain mesh, and a similar device should

be used with coarse malt. The terms "fine" and "coarse," as they are used at present, are only qualitative, not quantitative. Dr. Bleich advocates the manufacture of standard mills to be used in the laboratory, and by means of which the uniform grinding of the grains should be possible. And there should be some method of checking the results obtained by such mills, for clearly after a mill has been in use for a certain time the character of the meal which it produces will alter, inasmuch as the rollers, etc., will wear. There is a good opportunity here for someone to come forward with a really practical piece of apparatus.

Fires - Casualties

The grain elevator of Cook Bros., at Oconto, Wis., was burned recently.

The Rae Read elevator at Hulsa, I. T., collapsed March 2. The building was empty and had just been completed at a cost of \$8,000. It will be rebuilt.

Fire was discovered in the McMichael Elevator, at Mabel, Minn., about 6:30 p. m., February 23, but was extinguished before the building was seriously damaged.

The grain warehouse of John W. Chamberlain at Center Ossipee, N. H., was completely destroyed by fire on the evening of February 15. Loss about \$5,000, no insurance.

The elevator of the Western Grain Company at Steen, Minn., was burned February 23. The loss on building was \$3,000 and on contents \$1,500, fully covered by insurance.

The Prairie Mill elevator at River Falls, Wis., was destroyed by fire, with about 10,000 bushels of grain, January 25. Loss on building and contents about \$15,000, partially insured.

The plant of the Maritime Milling Co., at New Glasgow, N. S., was destroyed by fire February 25, with a grain elevator and thousands of bushels of grain. Loss estimated at \$150,000.

A fire which originated in an adjoining building, February 19, spread to the elevator of the New York Central Storage and Elevator Co., at Lockport, N. Y., and slightly damaged the elevator and contents.

The Winona Elevator Co.'s elevator and contents at Raymond, S. D., were destroyed by fire on the night of February 16. The fire is supposed to have been of incendiary origin. The loss was about \$4,000; insurance not stated.

The Farmers' Warehouse at Juliaetta, Idaho, was damaged by the recent Potlatch flood. A portion of the building containing 10,000 bushels of grain floated away, and damaged grain which was reclaimed from the part that remained intact was sold for 25 cents per bushel.

The grain elevator of J. E. Coyle & Son at Perry, Okla., caught fire February 6 and was almost completely destroyed. About 3,000 bushels of wheat were burned. The cotton gin and other adjacent buildings were saved. The loss is estimated at about \$2,000 in excess of the insurance.

Two elevators known as the Cargill Bros. and the Hyde & Hendrickson elevators at Trent, S. D., were burned on Sunday night, February 18. It is said that 20,000 bushels of grain was consumed also. The fire is supposed to have originated from a spark from an engine on a night freight train.

An unsuccessful attempt was made to burn the grain and hay warehouse of J. H. McGough at Traverse City, Mich., February 3. Early the next morning the charred remnants of a daily newspaper were found lying on the floor inside the warehouse. The burned paper had evidently been pushed through a hole in the side of the building. This is the fourth unsuccessful attempt made to fire the property within a year.

The elevator and milling plant of the maritime Milling Co., at New Glasgow, Nova Scotia, were destroyed by fire between 5 and 6 o'clock on the morning of February 25. The elevator was full of wheat and thousands of bushels ran into the river. Fully 115,000 bushels were destroyed. The origin of the fire is a mystery. The loss on the entire plant is not less than \$150,000, with insurance of \$102,000 on buildings and \$14,000 on grain in elevator.

John D. Long's 11-year-old son, Clarence, was smothered in grain in an elevator at Rising Springs, near Lewisburg, Pa., February 26, and the boy's younger brother narrowly escaped a similar fate. Mr. Long's two sons got into the large wheat bin at the top, and were playing in the grain. The elevator employees, unconscious of this fact, opened the chute below for the purpose of loading a car, and the suction resulted in the submerging of both boys. The younger was nearest the side of the bin

and managed to extricate himself. His brother, however, was carried rapidly down by the descending grain and his body was not recovered until half an hour afterward.

J. W. Loughmiller & Son's grain house and contents at Pottsboro, Texas, were destroyed by fire Sunday morning, February 11. The origin of the fire is unknown. The building contained about 15,000 bushels of oats, which were nearly a total loss and were only partially insured. The building was worth about \$600 and insured for \$400.

Two grain elevators at Steen, Minn., were destroyed by fire on the evening of February 23. They were the property of Edmunds & Co. and the Minnesota & Dakota Elevator Co. The fire originated in the Edmunds elevators and spread to the adjoining building. It is thought to have been of incendiary origin. The loss on both buildings and contents was heavy.

George F. Wetherbee, proprietor of the mill and grain store in Union Square, Worcester, Mass., met with a peculiar accident February 21. After throwing a snowball at a neighboring business man he started to run, but failed to notice an electric car, which was passing. He was struck by the car and was painfully bruised and badly lamed, but escaped without broken bones.

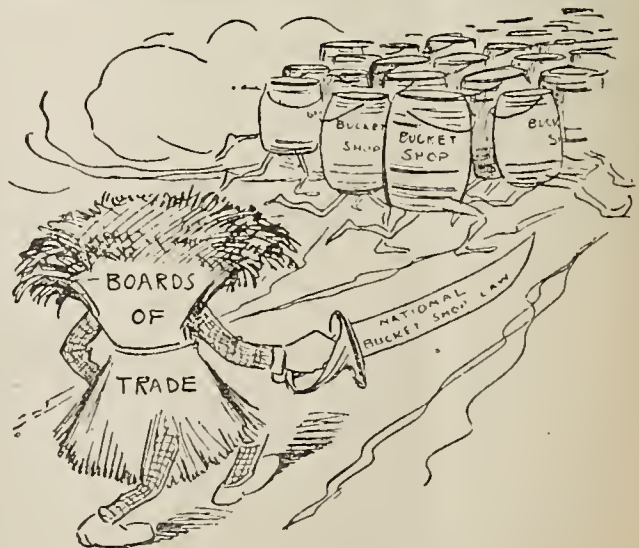
Fire which broke out in the dressing room of the Wright & Lawther plant of the American Linseed Company at the corner of Mather and Beach streets, Chicago, about noon March 6, destroyed the main factory building and slightly damaged the tank houses. The loss is estimated at about \$75,000, of which one-third is on building and two-thirds on machinery and contents.

The Farmers' Elevator at Morristown, Minn., was entirely destroyed by fire about 2 o'clock on the morning of February 8. The building was erected about two years ago at a cost of \$7,000. At the time of the fire it contained about 17,000 bushels of grain, mostly wheat. The building was insured for \$4,000 and the grain for \$7,000. The citizens of Morristown are in favor of rebuilding.

The St. Anthony & Dakota Elevator at Bartlett, N. D., was burned February 21. The capacity of the building was 40,000 bushels and it contained 14,000 bushels of wheat. The blaze was first noticed in the cupola of the building. The fire is supposed to have originated in a dust or gas explosion, from gas or dust generated by the operation of the machinery, though the plant was shut down for the night when the fire broke out.

Edwin C. Vance, manager of the Union Elevator at Deatur, Ill., and Irving Edgar, a laborer, were suffocated by gas in a corn oil tank on the afternoon of February 22. Edgar went into the tank to adjust some machinery, as was his custom, and was overcome by gas fumes from the benzola. Vance insisted on entering the tank to rescue Edgar, against the protestations of the workmen. He, too, was overcome and was taken out lifeless. Irving's body was recovered later. Vance was a young man and had been married but six weeks. Edgar left a young wife and one child.

George Stewart, an employe of the Barnett-Record Company, was killed by falling from a wooden horse on the top floor of the Omaha Company's new elevator at Allouez Bay, West Superior, recently. Stewart, with four other workmen, was standing on a platform or table and lifting heavy timbers to the top of the posts above them. In some way the platform was overturned and all the men fell to the floor, some ten feet below. All escaped injury except Stewart, who fell on his head and never regained consciousness. The deceased belonged to the Employees' Co-Operative Insurance Association, which is operated by the Barnett-Record Company, and his widow will get an amount equal to half a year's wages.



After the bucket shops.—Inter-Ocean.

TRANSPORTATION

No settlement of the "shoveling" contract at Buffalo has as yet been made.

The survey for the proposed Ft. Dodge & South-eastern Railway is now in progress.

A company is being organized to build a road from McPherson to Marquette, Kan., in the interests of the Missouri Pacific.

The Illinois Central has made a maximum rate of 12 cents to New Orleans on corn, being a reduction of about 3 cents.

The contract for the grading of the Rock Island extension from Kingfisher to Guthrie, Okla., about 16 miles, has been let.

Work has begun on an extension of the Chicago, Milwaukee & St. Paul from Bowdle, S. D., to a point on the Mississippi River.

A cut of 3 cents was made February 26 in the corn rate from St. Louis to the Southeast on Green Line territory and to Gulf ports via M. & O.

It seems certain that the B., C. R. & N. will this spring build its own line from Germania, Iowa, via Albert Lea to Minneapolis and St. Paul.

The Missouri Pacific, on March 6, made a rate on grain from Kansas City to St. Louis of 4 cents and to East St. Louis 5 cents. This is a reduction of 50 per cent.

The demand for lake tonnage to Buffalo from Chicago is comparatively light, and rates are weak at 2 3/4 on corn. Duluth rates are 3 1/2 to 5 1/2 on wheat to Lake Erie.

Work begins this month on the improvement of the N. P. docks at Tacoma. The harbor will be deepened to admit the largest ocean vessels to the railroad's new grain elevators.

It is officially stated that the Pere Marquette railroad system has decided to abandon its car ferry service between Muskegon and Milwaukee, and send all Michigan freight by way of Ludington.

A bill has been introduced in the Senate which provides for the incorporation of the Lake Erie & Ohio Ship Canal Co. The canal provided for in the bill is designed to connect Pittsburg with Lake Erie, in order to give to the Pennsylvania city the benefit of Lake Superior ores for its great manufactories.

As a part of the building trades strike in Chicago, the O. T. Co. has gotten into difficulty with the builders in reference to improvements at its Chicago docks. This may involve the seamen and nautical engineers in a "sympathetic" strike, which may tie up the O. T. line unless the general strike comes to an end soon.

In order to "lessen the effect of the opening of St. Lawrence canals to the sea, via Montreal," New York trunk roads operating from Buffalo will reduce their rates on grain from the West, via Buffalo and rail, to 3 cents a bushel. This is a drop of 1/2 cent a bushel, and makes a rate of 4 3/4 cents a bushel, which is the lowest ever in effect between Buffalo and New York.

The Ontario & Rainy River road, now being built from Port Arthur, Ont., to Winnipeg, will enter the grain-carrying trade of Minnesota and North Dakota. An extension will be built from the mouth of the Rainy River to Drayton, N. D. Wheat for export would leave the United States at Rainy River and be shipped from Canadian ports on Lake Superior. It may also be carried in bond to Boston or New York.

The upper St. Lawrence is not yet cleared to complete the 14-foot channel from the lakes to Montreal, so that the opening of the new route for deep water vessels from the lakes to Montreal will not take place for some time yet. Another obstacle in the way of the growth of the Montreal route to Europe is now discovered in the Belle Isle Strait at the mouth of the St. Lawrence, one of the most dangerous pieces of navigable water on the continent. Advances in the marine insurance rate have been made recently by the Lloyds for vessels going through this strait, which may cause an abandonment of this channel.

The old story must be repeated this month, to wit, that new rates for grain went into effect on March 5. The demoralization of February was so widespread that a meeting of the "magnates" was held in New York on March 1, when new rates to the East were made. Instead of being "restored," rates were publicly cut 7 cents to meet other rates, in anticipation of the opening of lake navigation. Beginning March 5, therefore, the nominal rate, which had practically been in effect for some time previously to March 1, but not openly, on domestic grain and grain products from Mississippi River common points, are as follows: To New York, 17 1/2 cents; Boston, 19 1/2 cents; Philadelphia, 15 1/2 cents; Baltimore, 14 1/2 cents. On export grain the rates will be

as follows: To New York and Boston, 13 cents; Philadelphia, 12 cents; Baltimore, 11 1/2 cents. On grain products for export: To Boston and New York, 15 cents; Philadelphia, 13 cents; Baltimore, 12 cents. Ocean room in good demand and rather firm. Rates are 3 1/2 d per bushel from New York and 3 d from Boston to Liverpool. The through rate on wheat from Chicago to Liverpool is 16.05 cents per bushel, all rail, via New York, and 15 1/4 cents via Boston. Flour is 36 3/4 @ 37 cents per 100 pounds via New York or Boston, and provisions 46.06 @ 52.50 cents. Charters to load and hold corn for shipment to Buffalo in the spring were made at 2 3/4 cents and clipped oats at 2 cents. These rates were in force all of twenty-four hours when it was discovered favored shippers were getting the export rate of 13 cents on domestic grain. It is claimed by the roads, however, that the cut was apparent, but not real, only grain contracted for prior to March 5 going East at that rate. It is also announced that the rates named above are to remain in force only until April 1, new rates to be made at a meeting to be held in Chicago on the 15th inst.

CORN IN JAMAICA.

It is one of the paradoxical features of tropical life that the inhabitants of those rich countries have to import nearly all their breadstuffs. The West India Islands, even Cuba and Jamaica, which possess the most fertile soils in the world, import from the United States their entire supply of flour, which is not so strange, but also nearly all their corn meal, which appears more singular. It is a fact of which intending American colonists should make careful note.

A writer in the Journal of the Jamaica Agricultural Society, after complaining of the high prices which the islanders are compelled to pay for American meal, goes on to detail his experience with a milling plant which he bought in Indianapolis, a splendid machine, as he freely admits, but it made a complete failure. He says:

"I regret to say that I have found it impossible to make corn meal at profit from Jamaica corn. I can, with the greatest care, only get 25 per cent of meal from our corn. I am not an agriculturist, but it appears to me that our corn is 75 per cent trash, and not fit for food. I have sent you samples of the impurities eliminated by the different pieces of the plant with an explanatory note on each. The machine has worked perfectly, too much so, I am afraid, for our corn, for, having taken out all the fiber and trash, there is little or no meal left, hence it is that I have been compelled to abandon the idea at the start."

In commenting on the above, the editor of the Journal writes:

"It is not as if Jamaica cannot grow corn. It is that the people will not grow corn. To make a little hole in hard ground and drop a few seeds in it and then leave the result to chance, is not growing corn. To cut the cobs not much over three-fourths full, roughly dry them until the still soft grains are hard enough to shell out, and take the small immature corn with a remarkably great amount of dust, we fear not always accidental, to market, to sell to make corn meal from, is suicidal to the interests of the people generally. Such corn may pass as food for horses and poultry, though it cannot be as nutritious as fully matured corn; but to make corn meal requires full, well-grown, mature grains of good size, and these can only be produced on well-cultivated soils, where corn has not been grown for a good many seasons, at least."—Ex.

ABOUT GLUTEN FEEDS.

Among the concentrated feeds none is more interesting than gluten, a by-product of corn glucose factories. Gluten is sold under various brands as Chicago, Cream, King, Hammond, Buffalo, Atlas, Oswego, Joliet and a score of others. These various gluten meals, gluten feeds, germ feed, etc., are a corn by-product, mostly that part of the grain left resulting from the manufacture of starch and glucose. Dry corn is composed of starch 79 per cent, crude protein 11 1/2 and crude ash fiber and fat 9 1/2. Most of the starch is removed in the manufacture and the part left is correspondingly rich, because of the high per cent of protein. While gluten feeds contain 20 to 40 per cent protein, whole or ground corn, wheat or oats contain only 10 to 14 per cent. Thus a bushel of gluten and of whole grain has a very different feeding value because of the concentration of a large quantity of protein into little bulk.

Where gluten feeds are not dried but contain a large per cent of water they may be fed to stock located near the mills and feeders can afford to pay for them \$7 per ton delivered on the farm. If the wet feed were dried, it would be worth fully as much as regular chop feed; but its moist condition also causes it to spoil rapidly. In changing to a ration including rich, concentrated feed, use it sparingly at first in connection with other feeds,

say a pint per day, and gradually increase to 5 or 6 quarts per day.

In the process, corn is first soaked in dilute, warm sulphurous acid water and then ground by being passed with water through mills to carry off the substance in suspension. The germs are removed, dried and crushed, the oil pressed out and the residue left in cakes and sold as corn germ cake. After the germs are removed, the grain is bolted through sieves, separating the hull, bran and broken germs from the starch and gluten. The hull, bran and broken germs, etc., are pressed and dried and sold as chop feed. The starch and gluten are run into concentrating tanks and then slowly through long, shallow troughs. The starch settles down like wet lime in these troughs, while the hard, flinty portion or gluten floats off into receivers, is concentrated and finally pressed in heavy filter cloths, run through steam dryers and sold as gluten meal. The gluten meal and chop feed mixed together, pressed and dried, constitute gluten feed.

Commercial gluten feeds vary more or less in composition from the nature of the process they undergo, but gluten feed or meal of prime quality should contain 20 to 40 per cent protein and 2 to 5 per cent fat. When feeding stuffs are sold on analysis or under state inspection laws, the relative value of concentrated feeds can easily be determined from the proportion of protein and fat contained.—Orange Judd Farmer.

COMMISSION

J. P. Truesdell & Co. and H. D. McCord, grain dealers, of New York, have consolidated, with a capital of \$150,000.

The Brokers' Grain Company of Kansas City, Mo., has been incorporated with a capital stock of \$10,000, by D. F. Piazzek, E. O. Bragg, W. A. Hinchman and others.

The McKiver Grain Co. of Minneapolis has opened a branch office at Madison, S. D., in charge of George Gould. Market quotations will be received every fifteen minutes.

Lapham & Co. of Detroit, Mich., have replevied 1,000 bushels of oats from Andrew Stewart, of the grain firm of Daniel Stewart & Co. Mr. Stewart says he bought too heavily, but will be able to pay dollar for dollar.

The Chambers-Farwell-Mackay Company was incorporated at Minneapolis, Minn., February 20, by Thomas Chambers, Isaac B. Farwell and Douglas Mackay. The capital stock is \$25,000 and the company will engage in the grain business.

The Seaboard Grain & Export Company has been incorporated at Duluth, Minn., by Wayland W. Sanford, L. A. Cole and Herbert R. Spencer, all of Duluth. The new company is capitalized at \$1,000,000 and the object is the buying, selling and shipping of grain.

The A. E. Anderson Company has been incorporated at Minneapolis, Minn., to do a general grain business. Capital stock, \$25,000; incorporators, A. E. Anderson of Cottonwood, Minn.; Cyrus E. Warren, Hazel, S. D., and Richard Tattersfield of Minneapolis.

H. S. Emerson & Co. have opened a commission house in Seattle, Wash. Mr. Emerson has sold to F. P. Taylor his interest in the Seattle firm of F. P. Taylor & Co., and has bought Mr. Taylor's interest in the Tacoma commission house of H. S. Emerson & Co.

The grain firm of Harlow & Thornton has been organized on the Chicago Board of Trade, Mr. Harlow having been formerly at the head of the firm of Harlow & Congdon and Mr. Thornton having been for a number of years wheat trader for Bartlett, Frazier & Co. Mr. Congdon will continue in business alone.

W. R. Mumford Co., commission merchants in grain, seeds, hay and millfeed at Chicago, Ill., have recently established branch offices at St. Louis, Mo., and at Minneapolis, Minn., in addition to their branches at Milwaukee, Peoria and Buffalo. The St. Louis branch is in charge of W. J. Marshall and the Minneapolis branch is in charge of W. A. Wetherwax.

Venezuela has raised the tariff on flour imported into that country from \$4.83 to \$7.72 a barrel.

A bill has been introduced in the New York Legislature providing for the erection and operation of grain elevators by the state in New York City and Buffalo.

The Kansas penitentiary managers have decided to sell the prison-made binder twine directly to the farmers, thus shutting out the dealers, or middlemen. Buyers must send their orders directly to the prison warden.

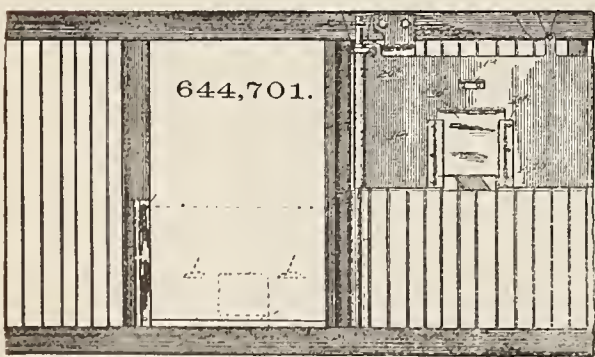
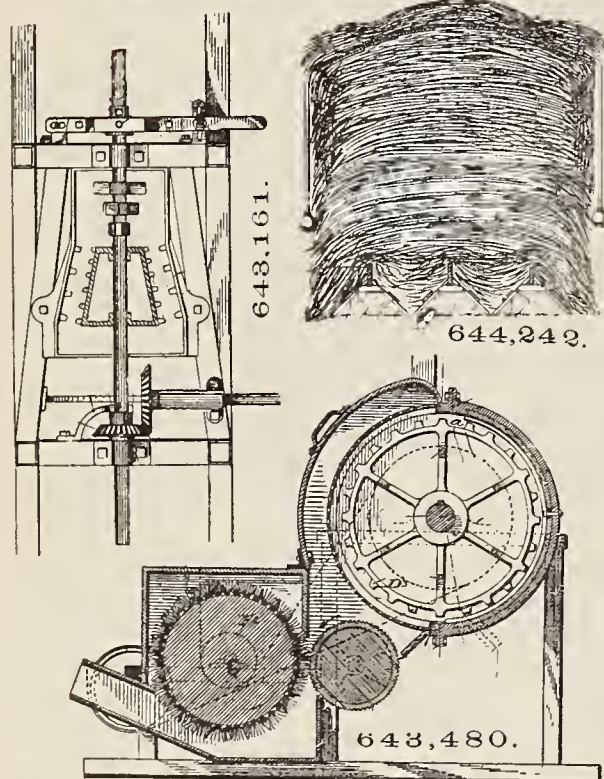
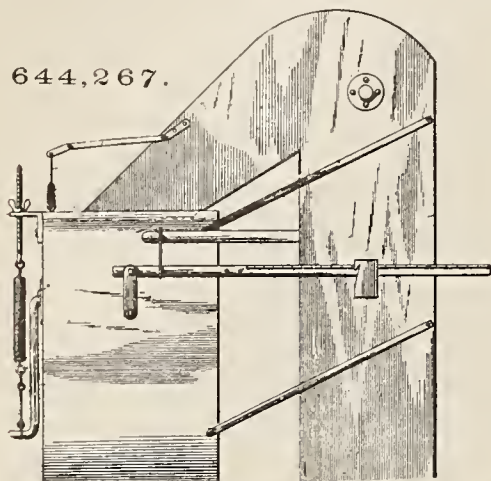
Late Patents

Issued on Feb. 13, 1900.

Corn Sheller.—W. C. Rowe, Decatur, Ill., assignor to the Union Iron Works, Inc., same place. Filed February 9, 1898. No. 643,161. See cut.

Igniter for Explosive Engines.—Fred. J. Macey, Ontonagon, Mich. Filed August 26, 1898. No. 642,513.

Machine for Cleaning Seed.—Alex. A. Diffey, Fort Smith, Ark. Filed September 8, 1899. No. 643,480. See cut.



Sacking and Weighing Machine.—Adelmer M. Bates, Chicago, Ill. Filed September 20, 1899. No. 643,102.

Issued on Feb. 20, 1900.

Sectional Screw Conveyor.—Albert C. Elmer, Detroit, Mich. Filed July 14, 1899. No. 643,636.

Feed Mill.—John O. Ensberg, Peterson, Minn. Filed October 7, 1899. No. 643,637.

Explosive Engine.—John F. Craig, Toledo, Ohio. Filed December 24, 1898. No. 644,004.

Issued on Feb. 27, 1900.

Grain Car Door.—Samuel W. Neall, Philadelphia, Pa. Filed April 14, 1899. No. 644,535.

Corn Shelling Machine.—Charles D. Prindle, Newkirk, Okla. Filed July 26, 1899. No. 644,458.

Grain Shed.—William F. Combs, Reno City, Okla. Filed November 11, 1899. No. 644,242. See cut.

Automatic Grain Scale.—Charles H. Wilken, Preston, Ia., assignor of one-half to Ira Leuker,

same place. Filed June 4, 1898. No. 644,267. See cut.

Vapor or Gas Engine.—John G. Lepper and William F. Dial, Bridgeport, Conn. Filed January 12, 1899. No. 644,295.

Issued on March 6, 1900.

Grain Doors for Freight Cars.—Thos. A. Boyers, Gainesville, Tex. Filed October 13, 1899. No. 644,701. See cut.

Gas Engine.—Albert T. Otto, Chicago, Ill., assignor to Robert L. Stevens, Hoboken, N. J. Filed December 26, 1895. Renewed November 29, 1898. No. 645,044.

PRESS COMMENT

SHIPPING SUBSIDY BILL.

James J. Hill's analysis of the shipping subsidy bill is very able. He shows conclusively that it would do the producers of the country little or no good. What the producers want is markets. This subsidy scheme would bestow millions, drawn from taxation, upon rich shipowners. . . . Again, the subsidy is for the distance sailed, both ways, and the shipowner is to be paid for carrying the products of other countries to the United States. . . . Hill's criticism is unanswerable.—Portland Oregonian.

DOESN'T APPROVE OF THE EXPERIMENTAL FARM.

A bill is on its way through Congress providing for the transfer of 500 acres of the Arlington estate to the secretary of agriculture for use as a general experimental farm. . . . The direction of the various branches of the work will make employment for quite a lot of appointees, and later a little army of them will be required to do the scientific farming and experimenting. But what benefit will it all be to the practical farmers of the really agricultural sections or to the makers and sellers of farm implements and vehicles? None whatever.—Farm Implement News.

THE WEST CARES LITTLE ONE WAY OR ANOTHER.

The people of the state of New York should get over any hallucination that the West is begging New York to help herself to hold her commercial supremacy. Cheaper freight rates have their attractions for the West, but the West is not confined to seeking them from New York. . . . The situation has not changed since Governor Seymour's time, when the old straw of federal ownership was thrashed over and our people decided, as they have decided several times since, that their own interests demand that they go into no partnerships with hostile or lukewarm tendencies.—Rome, N. Y., Sentinel.

CHICAGO'S EFFORTS TO REFORM.

The abolition of "put-and-call" trading on the Chicago Board of Trade is a sign of the intention of that body to eschew grain gambling that is decidedly hopeful. . . . This action shows a more genuine determination to abolish gambling operations in the agricultural staples than Chicago's great commercial body has been generally credited with. The class of contracts abolished are so clearly speculative that any attempt to reform that evil must attack them first. . . . This does not imply that speculation cannot be checked. When we live under a system of law that can make a man's life depend on the legal determination of the mental intention with which he strikes a blow or pulls a trigger, it certainly ought to be possible to determine the mental purpose with which he contracts to buy or sell merchandise for the future. But it is pertinent that the sweeping prohibition of the purely gambling contracts of puts and calls must be modified when—as is to be hoped—the Chicago Board comes to the prohibition of speculation in other forms of futures.—Pittsburg Dispatch.

RAILROAD AND CANAL COMPETITION.

The announcement that the railroads running through New York state have cut grain freight rates to a minimum to fight the proposed Canadian canal-Montreal route rate does not necessarily mean that the result will be decreased earnings. Neither does the strong opposition to Erie canal improvement now coming from the New York Central necessarily prove that the road would be injured by the increased efficiency of the canal route. The fact that the New York Central has been brought to its present high state of development while continuously operating in competition with the Erie canal is believed by many railroad authorities to indicate that low rates were the making of this great road. They reason that canal competition caused the New York Central management to put rates down until results taught it that the gain of business consequent on low charges more than offset the losses sustained. Freight rates that prevent or check

the industrial growth of the country injure the railroads more than anyone else. It would also seem that many of the railroads have not yet gotten down to the level of rates consistent with their upbuilding.—New England Statist.

THE ERIE CANAL BILL.

John Chamberlain says in the Marine Review that it does not look as if the bill [to appropriate \$82,000,000 to improve the Erie Canal] could be passed at this session of the New York Legislature. He says that among the things that have helped to defeat the plan, one was the fear that so radical a change would be construed to be a new canal and would interfere with the constitutional mandate against abandoning the old one. Another thing is the strong sentiment that the general government should take up and pay for the work. Even those who have heretofore opposed governmental control now say this may be the proper solution of the subject. There are still others who wish the general government to contribute toward the work but leave the control of the same with the state. Thus he argues that through this multiplicity of ideas the work must go over for the present. In the meantime Canada is going ahead with her various measures to secure a still larger share of the western trade.—Ex.

THE IMPORTANCE OF CORN.

"Yes," said Colonel Stillwell, "everything is progressing nicely with the people in my part of the country, I am happy to say."

"It is a fine region," said the young girl.

"It is. One of the most salubrious on earth. It is there that the great golden orb, as it swings on its diurnal path across the sky, pauses to send his tenderest messages across the sunbeams which bind him to the earth."

"You don't say so!" exclaimed the young girl. "It's something like wireless telegraphy, isn't it?"

The Colonel looked a little annoyed, and she hastily exclaimed: "It must be perfectly lovely there."

"It is. The only gold we ask for is that which is coined from the sunlight into great ears of yellow corn. That's what my neighbors and I used to pride ourselves on."

"Corn is a very useful article," she said, with a dainty chirp.

"Of course it is. People could not get along without it. I remember one year—one of the most terrible I ever experienced. My sympathies were never before so deeply moved. There was a drouth. The corn crop was a failure."

"It must have been dreadful. Still, you could send elsewhere."

"I could. So could the other comparatively well-to-do people. But I was thinking of the poor. I tell you, if it hadn't been for the charity of a number of charitable citizens, myself among them. I have no doubt that a great many of those unfortunate beings would have died of thirst."—Washington Star.

Post & Morell of Fulton, Ill., in February loaded two cars of oats weighing 1,836 and 1,600 bushels respectively.



[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

ENGINE FOR SALE.

A 25-horse power steam engine, ready to run. \$100. EUGENE F. JONES, Milford, Ill.

FOR SALE.

A practically new 1-ton wagon scale, latest style beam. Also 7-h. p. gasoline engine. Address MACHINERY, Box 3, care "American Elevator and Grain Trade," Chicago, Ill.

IOWA ELEVATOR FOR SALE.

For sale, an elevator on C. & N. W. Ry. in Iowa corn and oats territory. Capacity, 20,000 bushels. Address

J. J. FONES, 522 Rialto Bldg., Chicago, Ill.

ENGINES AND BOILERS.

For sale, a quick-stroke 40-horse power automatic engine. Also a lot of different sizes of boilers and engines for sale cheap. Address

PHILIP SMITH, Sidney, Ohio.

FOR SALE.

Second-hand Enreka No. 3 Horizontal Brush Machine; capacity, 100 to 150 bushels per hour. S. Howes, manufacturer; good condition; with shoe. Price, \$125, or best offer until April 15, 1900.
BOX D, Cushing, Woodbury Co., Iowa.

MICHIGAN ELEVATORS FOR SALE.

One of the best elevators in Michigan, built in 1895, and equipped with modern machinery. Doing a large business in grain, beans, coal, etc. Located in one of the best sections of the state. Will be sold at a bargain. Cost, \$8,000.

Will also sell elevator at Whitmore Lake.

C. E. BURNS, Howell, Mich.

GASOLINE ENGINES FOR SALE.

One 7-h. p. Weber Gasoline Engine, \$195. One 10-h. p. Fairbanks-Morse, \$325. One 15-h. p. Norman (Chicago), \$250. One 10-h. p. Otto, \$275. One 20-h. p. Springfield, \$375. Replaced with Backus Engines. Moral: Buy the best at the start.

BACKUS GAS & GASOLINE ENGINE CO., 171-173 Lake St., Chicago.

NORTH DAKOTA MILL.

For sale, a modern, 100-barrel mill in good wheat country. Good custom and merchant trade. Mill has run steady since built three years ago. Also doing a good elevator business in connection. Railroad track to mill. Steam power; cheap fuel. Write for particulars and price.

NORTH DAKOTA, Box 12, care "American Elevator and Grain Trade," Chicago, Ill.

FOR SALE.

New and second-hand gasoline engines, roller feed mills, steam engines, boilers, shafting, pulleys, belting, flour mill and elevator furnishings at your own price.

We corrugate rolls on best machines at large discount. Get our prices and save money.

JACKSON CORN & FEED MILL CO., Minneapolis, Minn.

ELEVATOR FOR SALE.

Capacity, 40,000 bushels; best on C. & A. Railroad outside of cities. Fully equipped with elevating and cleaning machinery. Concrete floor. Situated in one of the best wheat and corn growing counties of the state. Belongs to an estate and must be sold for a division by or before May 1, 1900, by order of court. For full particulars address

W. T. SWINNEY, Trustee, Gilliam, Saline Co., Missouri.



[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

REPRESENTATIVES WANTED.

Millwrights, machinery dealers and manufacturers' agents wanted to represent us in their territory, on commission, for the sale of elevating, conveying and power transmitting machinery, mill and elevator supplies. Address

WELLER MFG. CO., 118 and 120 North Ave., Chicago, Ill.

TRAVELING SALESMAN WANTED.

Traveling salesman experienced in grain elevator machinery. Must thoroughly understand making plans and estimates to suit special conditions and also successfully solicit orders for general flouring mill and grain elevator supplies. State experience, former employers, references and salary. Address

GREAT WESTERN MFG. CO., Leavenworth, Kan.

GRAIN BAGS—BURLAPS.

All kinds of Bags, New and Second-Hand.
ORDERS FILLED PROMPTLY.

W. J. Johnston, 182 Jackson St., Chicago. Factory and Office.

HAGERTY, HUNTER & CO.,
PEORIA, - ILL.,

CONTRACTORS FOR GRAIN Elevators and Malt Houses.

Plans and Estimates Furnished.

Also Keep a Full Line of Machinery in Stock, such as

Shafting, Belting, Pulleys, Hangers, Etc., Etc.

ROOFING AND SIDING.

The Garry Iron and Steel Roofing Co.,

168 MERWIN STREET, CLEVELAND, O.,

MANUFACTURES



Steel Roofing,
Corrugated Iron,
Siding and Metal
Ceiling.

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WE manufacture all gauges of corrugated iron, either painted or galvanized. We make Patent Cap Roofing, Roll Cap Roofing, "V" Crimped Roofing, Metal Ceilings, etc., etc. We make a specialty of Corrugated Iron and Metal Roofing for Grain Elevators,

And take contracts either for material alone or job completed. We have done a large amount of this work in the past three years, in fact, we are the largest manufacturers of this material in the Western States. Write us for prices. We can save you money.

SYKES STEEL ROOFING CO.,

611 So. Morgan Street, - - - CHICAGO.

Eastern Works: NILES, OHIO.

C. H. Matthiessen, President. S. T. Butler, Vice-President.
Chas. L. Glass, Treas. and Sec'y.

The Glucose Sugar Refining Company,

FACTORIES: GENERAL OFFICES:

Chicago } Ill. Marshalltown } Ia. The Rookery,
Peoria } Rockford } CHICAGO, ILL.

The world's largest consumers of Corn. Daily consumption, 100,000 bushels. We are always in the market for corn, and confine our bids to regular grain dealers. Write or wire us when you wish to sell.

JOS. P. GRIFFIN, Mgr. Grain Dept.

E. R. Ulrich & Sons,
SHIPPERS OF WESTERN GRAIN,

Especially High Grade White and Yellow Corn,
Also Mixed and White Oats.

Elevators through Central Illinois on Wabash Ry., Chicago & Alton Ry., C. P. & St. L. Ry., and St. L., C. & St. P. Ry.

Main Office, 6th Floor, Illinois National Bank Building,
SPRINGFIELD, ILLINOIS.

Write for prices delivered.

COMMISSION CARDS.

[We will not knowingly publish the advertisement of a bucketshop keeper or irresponsible dealer.]

R. W. VAN TASSELL.

J. H. BUNN.

VAN TASSELL & BUNN,

RECEIVERS AND SHIPPERS,

44 AND 46 CHAMBER OF COMMERCE, PEORIA, ILL.

References, any bank of Peoria, or Commercial Agencies.

Consignments and Orders Solicited.

COMMISSION CARDS.

HENRY HEMMELGARN.

Established 1861.

PHILIP H. SCHIFFLIN

H. HEMMELGARN & CO.,
COMMISSION MERCHANTS,

GRAIN, SEEDS AND PROVISIONS,

ROOMS 317, 318 AND 319 RIALTO BUILDING,

Adjoining Board of Trade.

CHICAGO, ILL.

Consignments Solicited. Correspondence Invited.

Members Chicago Board of Trade.

JAMES P. SMITH & CO.,

GRAIN MERCHANTS,

417-418 Rialto Building, CHICAGO.

Consignments Solicited.

THE KEMPER GRAIN CO.
Grain Commission,

RECEIVERS AND SHIPPERS OF

Grain, Hay and Mill Products,

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ARMOUR & CO.,

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GRAIN BUYERS AND DEALERS.

The Paddock Hodge Co.,
TOLEDO, - - OHIO.

Owners and Operators

LARGEST SYSTEM ELEVATORS IN OHIO.

Special attention given to consignments and futures.
Write, wire or phone us when you want to trade.

If you don't get them ask for our bids, your track.



F. H. PEAVEY & CO.,

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GRAIN RECEIVERS.

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Consignments Solicited.

MILLING WHEAT A SPECIALTY.

WARREN & CO.,
...GRAIN...
COMMISSION MERCHANTS,

Rooms 7 and 9 Chamber of Commerce,

PEORIA, - ILL.

W. M. BELL, PREST. WM. D. SAWYER, VICE-PREST. & TREAS. JOHN H. BOEMER, SECY.
THE BELL COMMISSION CO.
INCORPORATED.

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GRAIN, SEEDS AND FEED,

58 Chamber of Commerce,

MILWAUKEE, WIS.

Represented in Chicago, Minneapolis, Duluth, Kansas City.

COMMISSION CARDS.

CHARLES D. SNOW & Co.,
COMMISSION MERCHANTS,

MEMBERS
CHICAGO BOARD OF TRADE

230 RIALTO BUILDING,
CHICAGO.

Our Vest Pocket Market Manual furnished free on application.

ESTABLISHED 1870.

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GRAIN, HAY, SEEDS, MILL FEED.

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Branch Offices: MINNEAPOLIS, MILWAUKEE, ST. LOUIS,
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CAREFUL ATTENTION GIVEN YOUR CASH AND FUTURE BUSINESS.

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CONSIGNMENTS SOLICITED.

PITTSBURG, PA.

MILTON SHIVE,
Brokerage and Commission
GRAIN AND MILL FEED.

464 Bourse, - - - Philadelphia.

CONRAD KIPP. S. K. NEER. J. H. ROYER.

Greenville Grain Co.,

112 W. FOURTH ST., GREENVILLE, OHIO,

WHOLESALE DEALERS IN

WHEAT, CORN, OATS, HAY AND STRAW.

(CAR LOTS ONLY.)

Will buy on any railroad and can make shipment via any line. Milling wheat a specialty. Write or wire for prices. Will give prompt reply. References: Farmers' National Bank, Greenville Bank Co. Dun or Bradstreet. Correspondence solicited.

DANIEL P. BYRNE & CO.,

SUCCESSORS TO

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Established 1851.

Incorporated 1887.

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E. W. BAILEY & CO.,
Commission Merchants,

GRAIN, SEEDS AND
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ESTABLISHED 1876.

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CONSIGNMENTS and FUTURES given special attention.

Ask for our "Daily Market Letter and Track Bids."
Correspondence requested.

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L. EVERINGHAM & Co.,

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ORDERS AND CONSIGNMENTS SOLICITED.

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For Cash and Future Delivery.

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Make all drafts on Main Office.

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BARLEY A SPECIALTY.

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Careful attention given to orders from Brewers, Maltsters and Millers.

MILMINE, BODMAN & CO.,

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RECEIVERS, SHIPPERS, EXPORTERS.

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70 Board of Trade,
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NO. 1 BOARD OF TRADE,
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Stocks, Bonds, Grain,
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PRIVATE WIRES . . .

J. H. WARE. E. F. LELAND.

Consign your GRAIN and SEEDS
and send your orders to

WARE & LELAND,

200-210 Rialto Building,
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WRITE FOR OUR
DAILY MARKET LETTER.

Fifteen representatives constantly on the floor of
the Board of Trade, thus insuring prompt execution
of all orders, and close attention to all
business entrusted to us.

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In Charge of Receiving
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COMMISSION CARDS.

ROSENBAUM BROS.

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Grain and Seeds.

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C. A. FOSTER,
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Any Railroad.

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References: { Manufacturers National Bank, Philadelphia, Pa.
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E. L. ROGERS & CO.,

ESTABLISHED
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Liberal advances made on consignments. Market reports furnished gratuitously on application. Correspondence solicited.

References: { Corn Exchange National Bank.
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J. F. ZAHM. F. W. JAEGER. F. MAYER.

ESTABLISHED 1879.

J. F. ZAHM & CO.,

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TOLEDO, OHIO.

Handling consignments and filling orders for
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SEND FOR OUR RED LETTER.

GEO. N. REINHARDT & CO.

MELROSE STATION, NEW YORK CITY.

Geo. N. Reinhardt & Co.
DEALERS IN
HAY, STRAW & GRAIN.

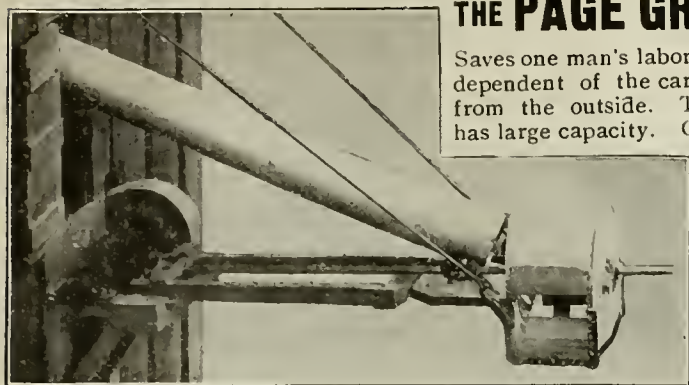


TELEPHONE 61 MELROSE
162ND TO 163RD ST. HARLEM RAILROAD (PORT MORRIS BRANCH)

We sell on Commission and buy direct,

HAY, GRAIN AND FEED.

Storage capacity 8,000 bales, 30,000 bushels
Let us know what you have to offer.

**THE PAGE GRAIN LOADER**

Saves one man's labor in loading cars. Is independent of the car and controlled entirely from the outside. Takes little power and has large capacity. Gives satisfaction wherever used. We guarantee it and send it on 30 days' trial. Write for price and particulars.

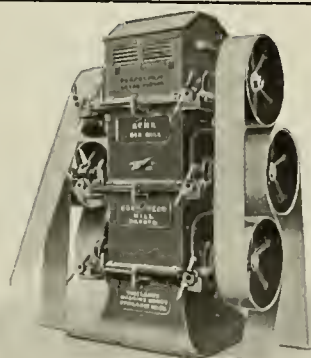
WALTERS BROS.,
75 Board of Trade,
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Acme 4 and 6 Roll Corn and Feed Mills

All sizes, fitted with our new Automatic Shake Feed, steel screen and tandem belt drive. Rolls can be removed from mill through panel doors on sides, or each section can be taken apart separately.

Rolls Reground and Recorrupted.



YPSILANTI MACHINE WORKS, Ypsilanti, Mich.

FRED GROTENRATH, CONTRACTING MILLWRIGHT,
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PLANS, SPECIFICATIONS and ESTIMATES

Furnished on short notice for complete power plants of all descriptions.

GRAIN ELEVATORS A SPECIALTY.

CORRESPONDENCE SOLICITED.

BRAIN TOOLS

Save time and hard work and insure accurate results.

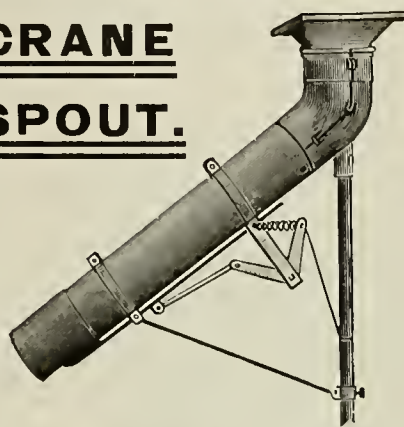
THE GRAINMAN'S ACTUARY

Shows at a glance the cost of bushels and fractional parts of bushels for any amount up to 50,000 bushels. Contains 214 well printed and well bound pages. Sent postpaid on receipt of price, \$1.00.

No miller or grain dealer can afford to be without it. Address

MITCHELL BROS. CO., 315 Dearborn Street, Chicago.

THE BIRCHARD CRANE SPOUT.



Patented Dec. 19, 1899.

Prevents mixing grain and is under absolute control of operator.

Made of heavy cast iron and No. 12 steel. The steel extension is made so as to be turned when worn and get the wear all around. Will wear longer than any three on the market.

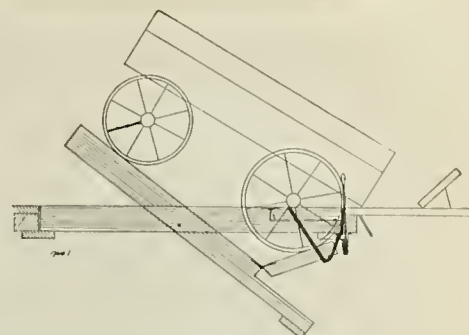
Can be made to suit nearly any location without change of spouting.

Write for circulars and prices.

DOWNIE-WRIGHT MFG. CO., YORK, NEB.

“ We find the American Elevator and Grain Trade very instructive and appreciate its worth.”

GOFFS GRAIN CO.,
Goffs, Kan.



(LOW-WHEEL WAGON.)

The Adjustable Elevator Dump

Gives both low and high wheel wagons about the same slant when dumped. It lets all wagons down easy, doing away with all jolts and strains on the wagon. Gives satisfaction to dealers as well as their customers. Is easily attached and can be used on all sill dumps now in use, with no expense outside of cost of attachments, and the cost is within the reach of all who want the best dump. Write for price list, description and testimonials. Manufactured only by

SIMS BROS., PARIS, ILL.

KANSAS CITY DES MOINES



Chicago, Milwaukee & St. Paul Ry.

DIRECT LINE

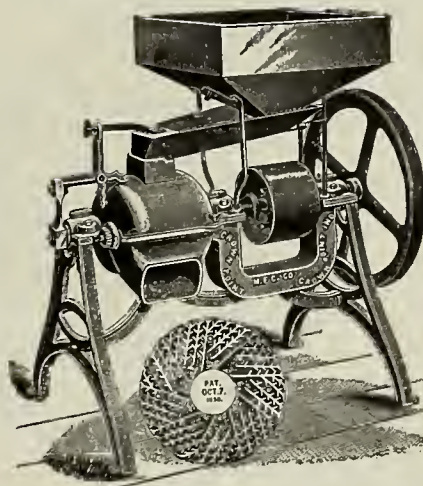
FOR PASSENGERS AND FREIGHT

THROUGH ILLINOIS AND IOWA.

Ticket Office, 95 Adams Street.

THE CROWN POINT GRINDING MILL. The Best on Earth

For Fine Grinding and Easy Running.



They are all equipped with our Patent Self-Sharpening Burrs, which were awarded First Prize and Medal at the World's Columbian Exposition

Do not dull when running together.

Grinds OATS perfectly fine and all grain, damp and dry.

No heating of grain; no lost motion.

You cannot afford to be without one.

Send for Descriptive Circulars.

CROWN POINT MFG. CO., CROWN POINT, IND.

Price Reduced
From \$2 to \$1 on
Grain Dealers'
AND
Shippers' Gazetteer
For 1899---1900.

This Gazetteer contains freight agents' official list of flouring mills, elevators, grain dealers, shippers and commission merchants, located on all the principal railroads in the United States and Canada.

It also contains the grading and inspection rules of leading markets.

This is the handiest and most complete list of the kind published. If you do business in this line, you can scarcely afford to be without it.

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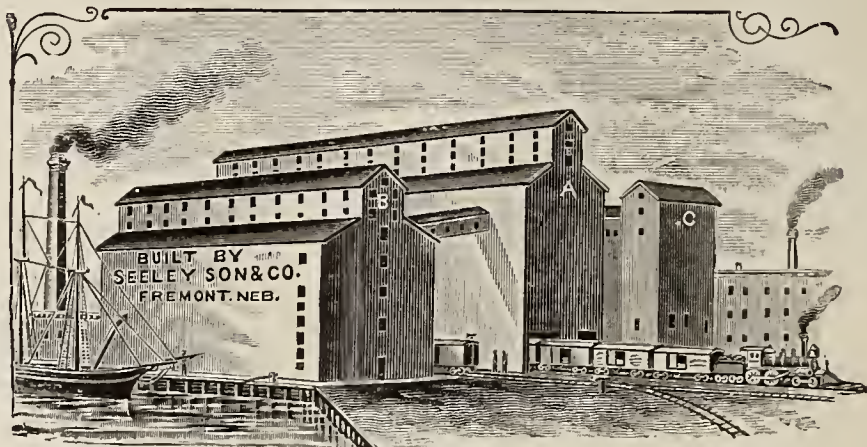
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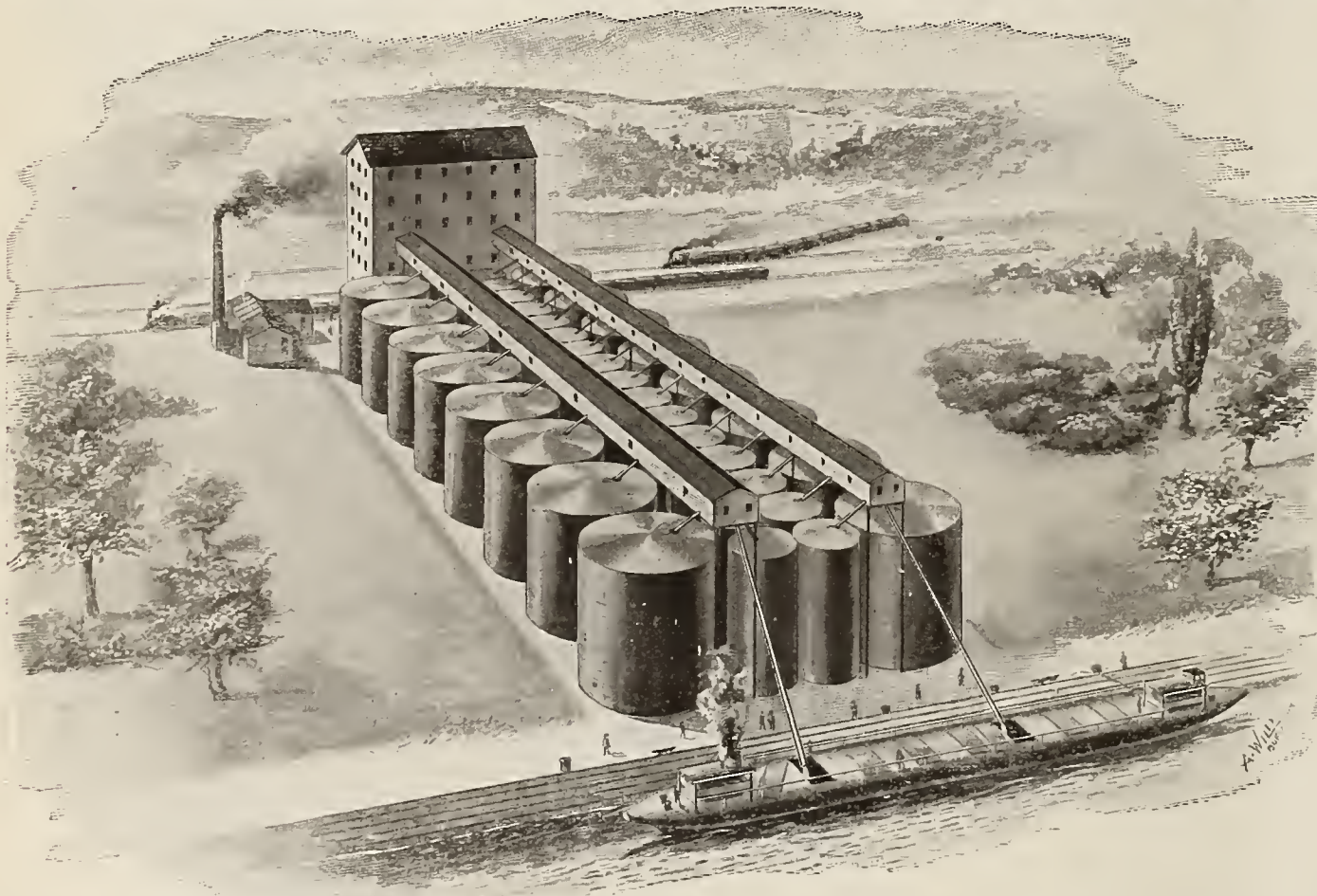
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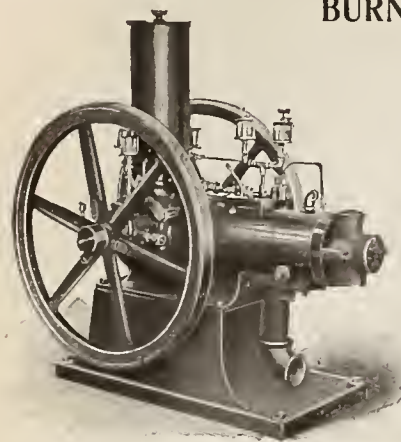
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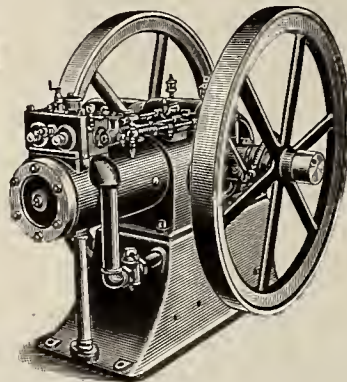
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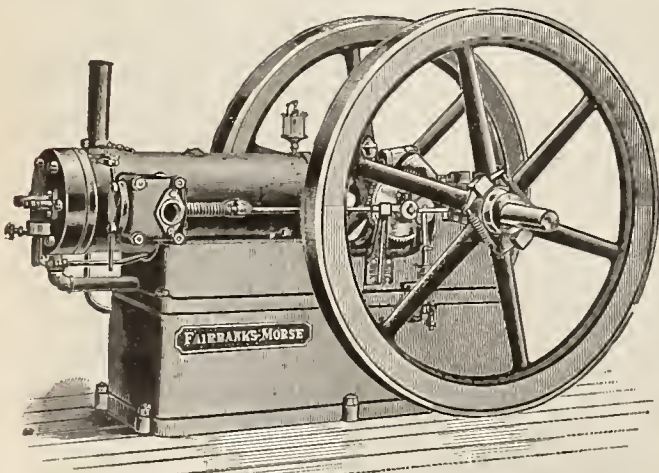


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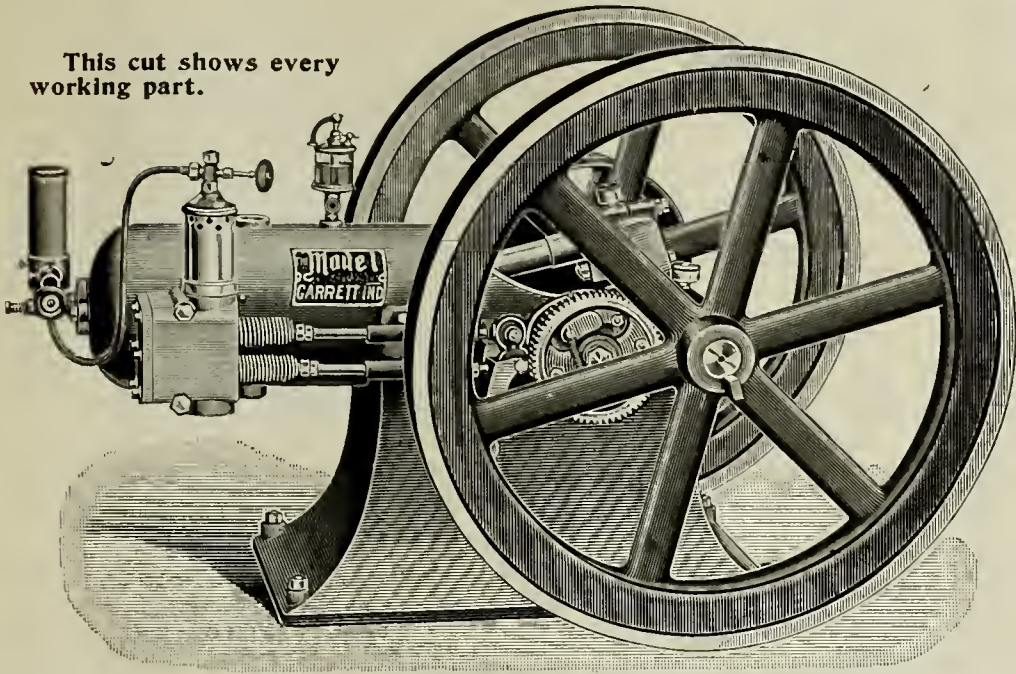
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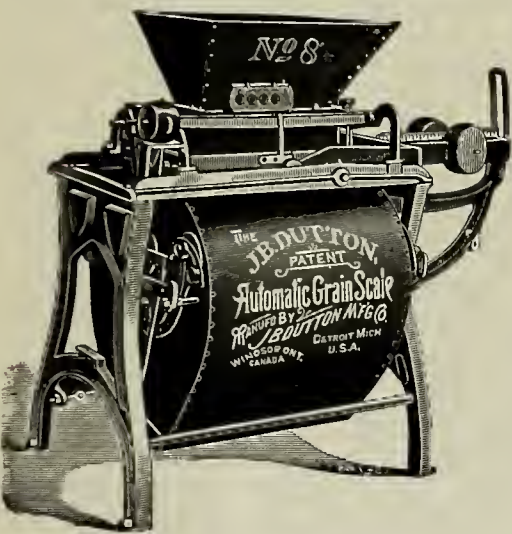
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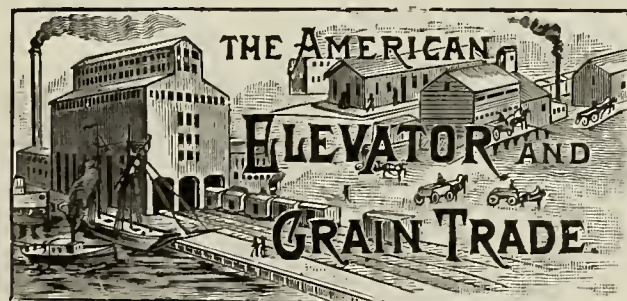
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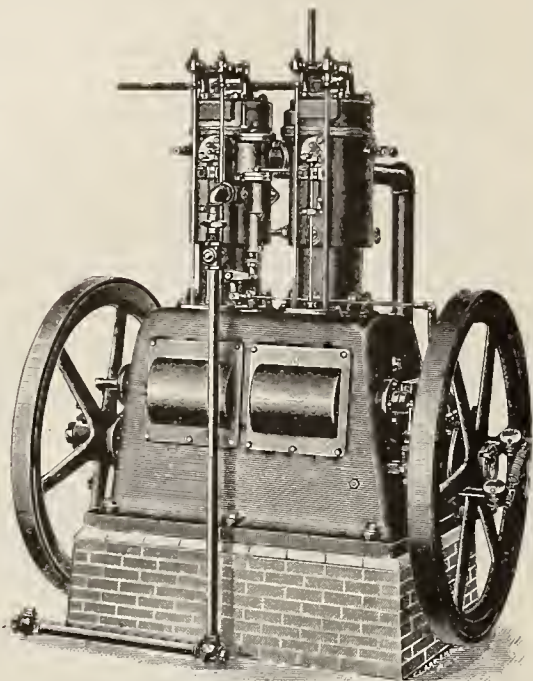
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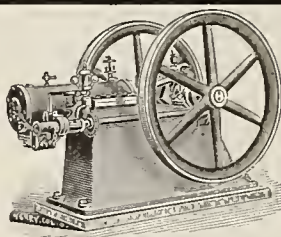
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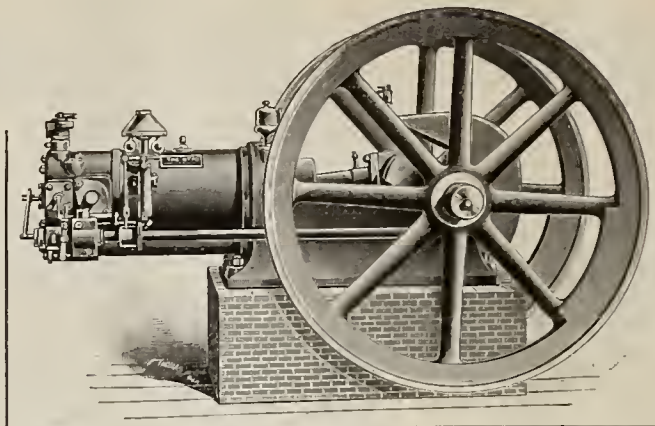
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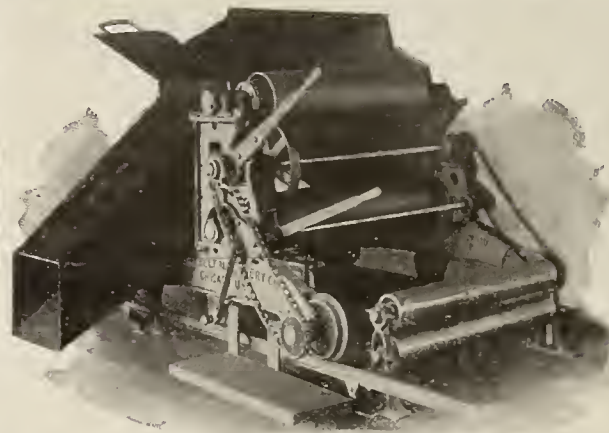
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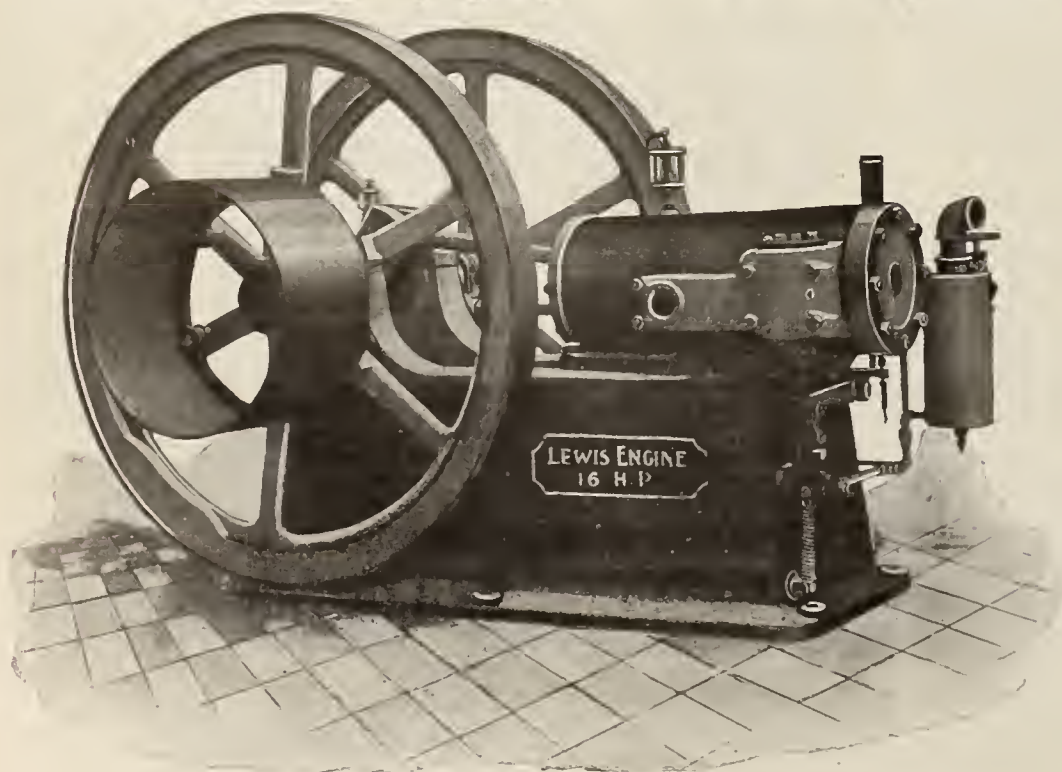


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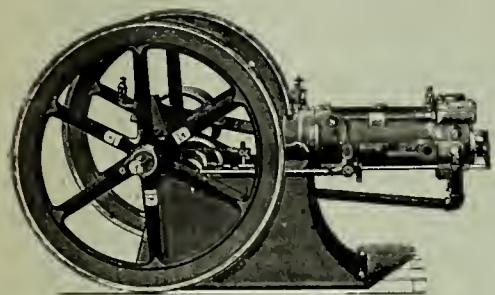
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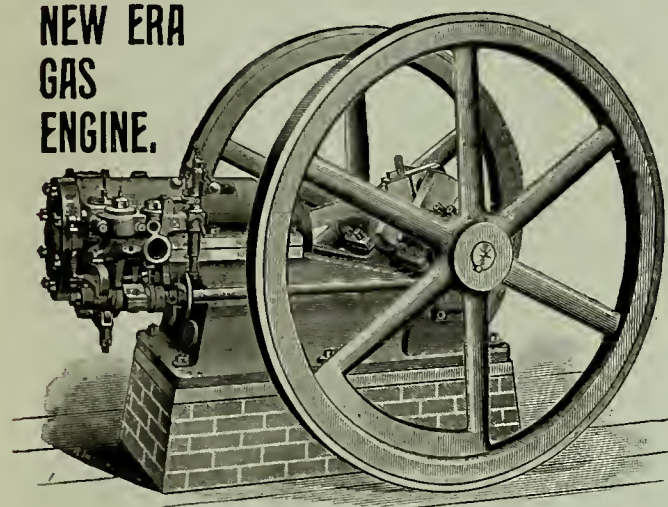
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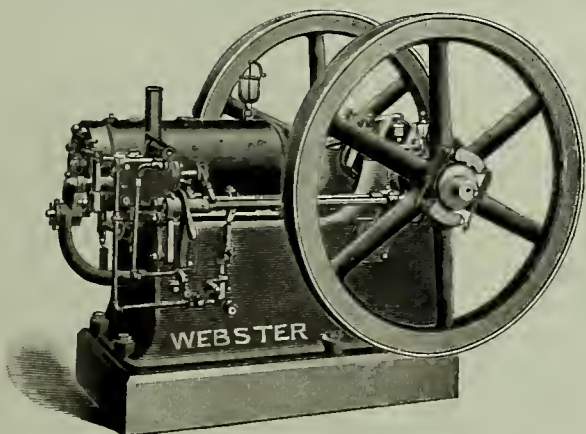
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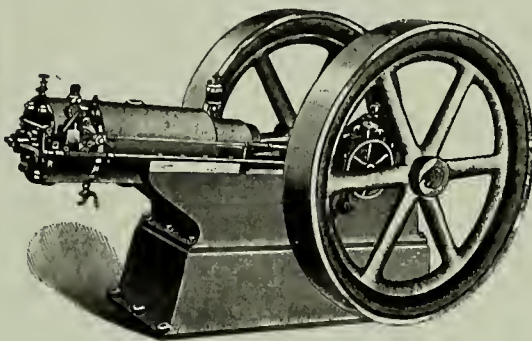
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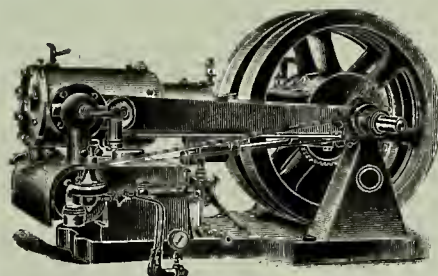
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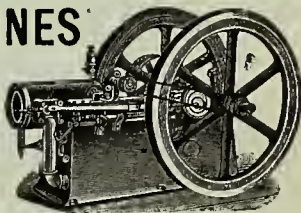
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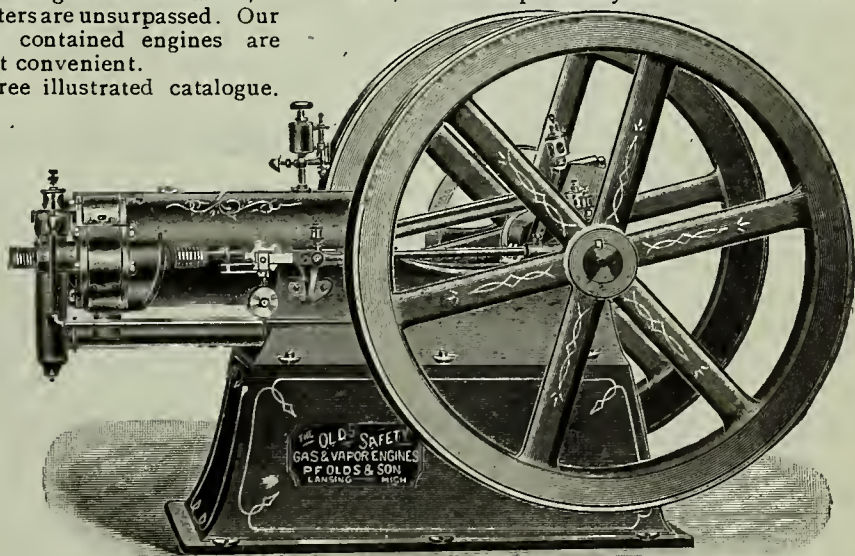


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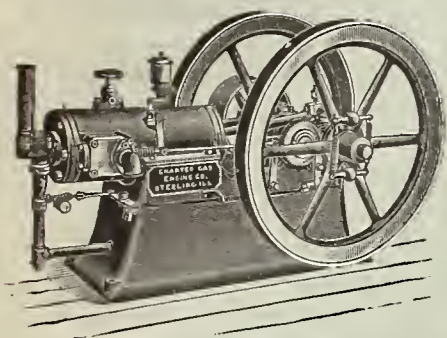
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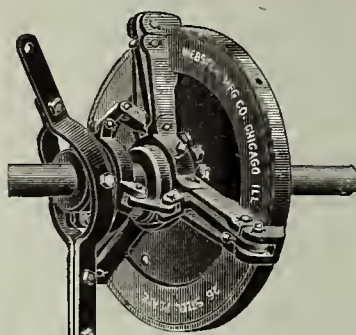
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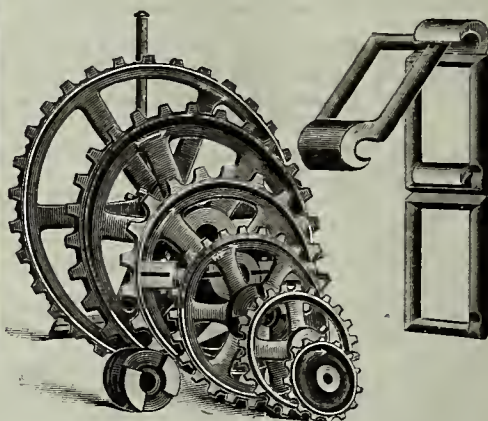
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